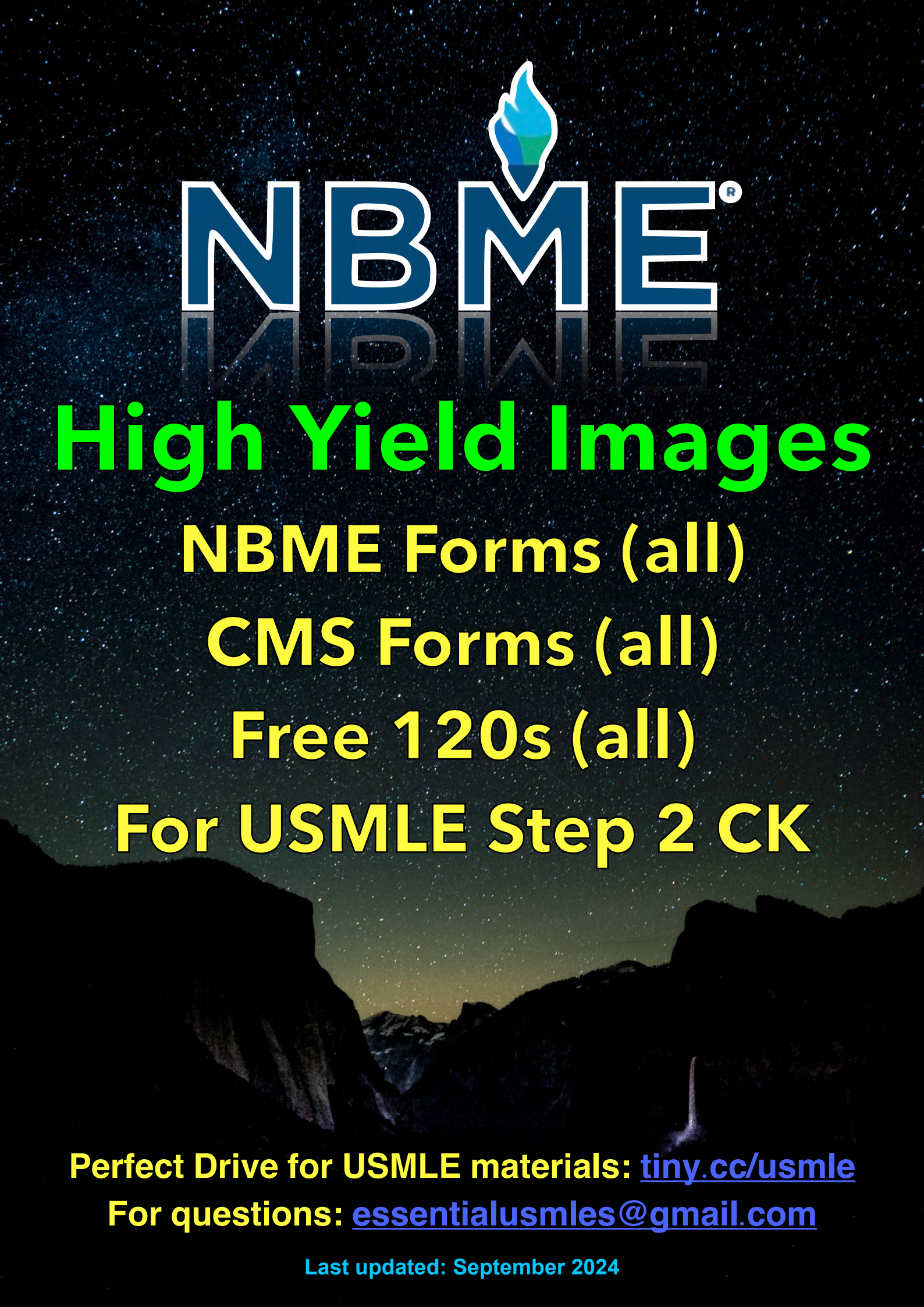
NBME
High Yield Images
NBME Forms (all)
CMS Forms (all)
Free 120s (all)
For USMLE Step 2 CK
Perfect Drive for USMLE materials: tiny.cc/usmle
For questions: essentialusmles@gmail.com
Last updated: September 2024

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The findings of each image is written in addition to what the question asked, that's why sometimes there is the next diagnostic step or the treatment. there could be other investigations or treatment for the same condition but I have only written the one that was the answer to the case.

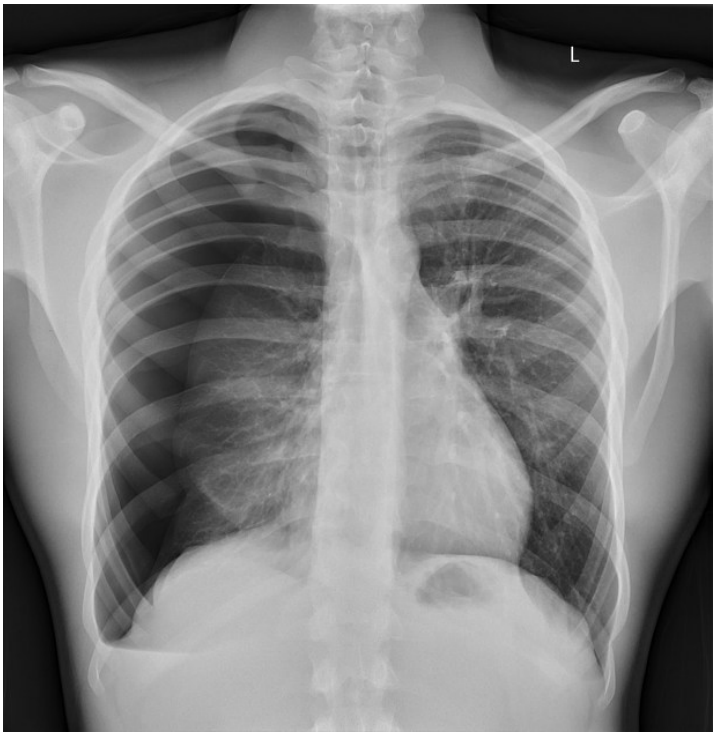
This sign means the exact image has been repeated in other NBMEs and/or CMS so I may have only put it one time in this file.

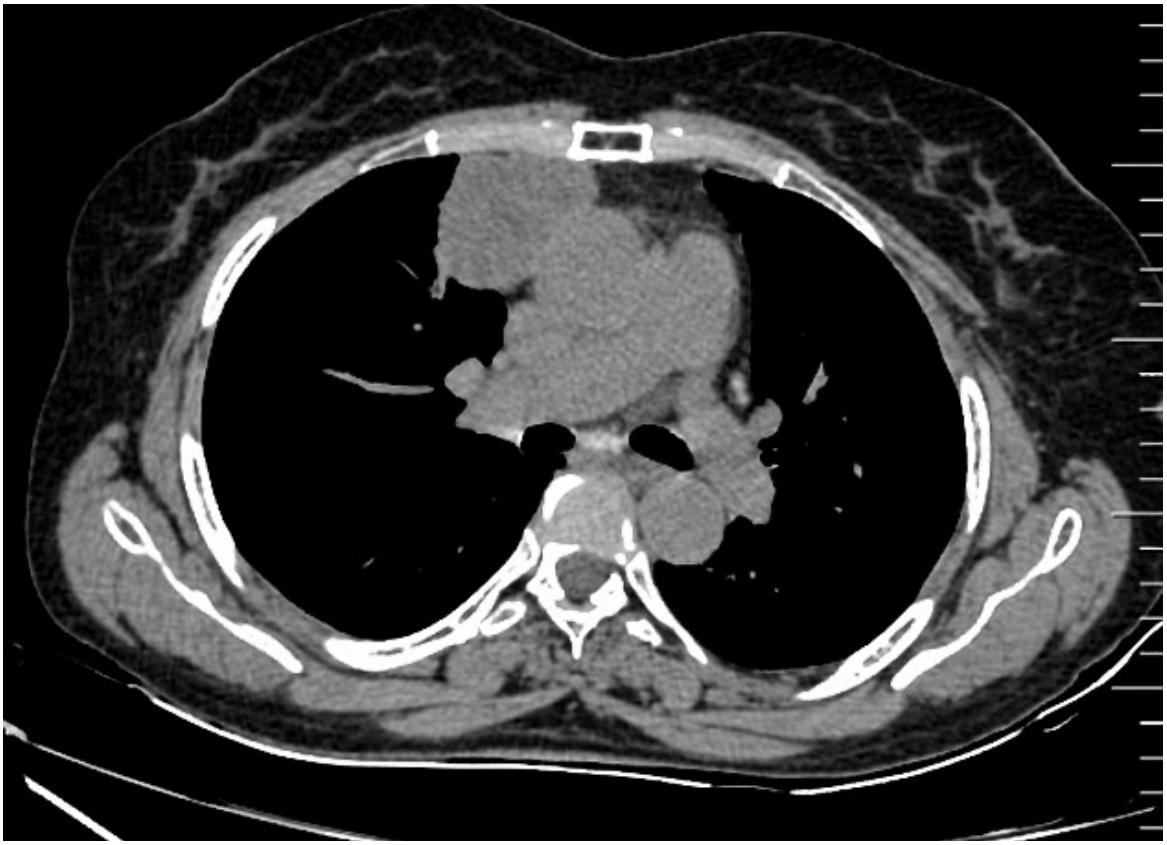
NBME 1

The PDF file of this form is only text. From my search, it appears there have been only 3 images on this form:

1. Photograph of benign cystic teratoma.
2. CXR of pneumothorax (which needs tube thoracostomy)
3. Chest CT of Thymoma (associated with myasthenia gravis)

● I don't have the original NBME images of this form, but these exact cases are repeated in NBME 6 so you can check there for original images (which are very poor quality) thus I will bring corresponding images from google search just to be familiar.

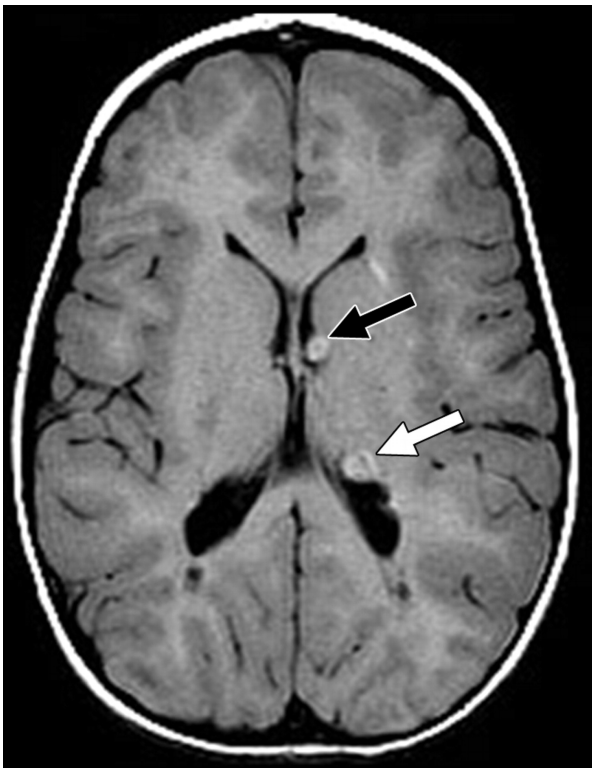


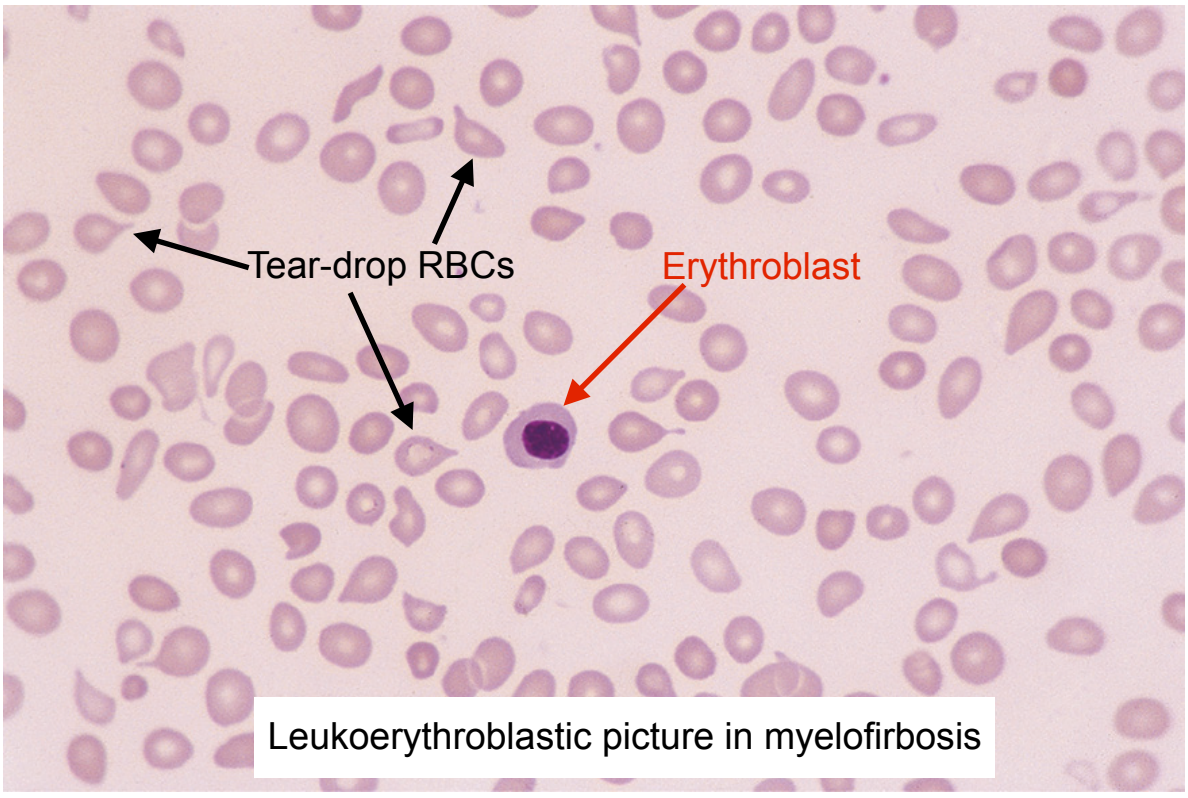


NBME 2

The PDF file of this form is only text. From my search, it appears there have been only 4 images on this form:
1. ECG of atrial fibrillation (this image is already present in NBME 9)
2. Brain MRI of tuberous sclerosis (associated with ash leaf spots & seizures)
3. Photograph of herpes zoster ophthalmicus (treated by acyclovir)
4. Blood smear of myelofibrosis (which progressed from polycythemia vera)

● I don't have the original NBME images of this form but I will bring corresponding images from google search just to be familiar.



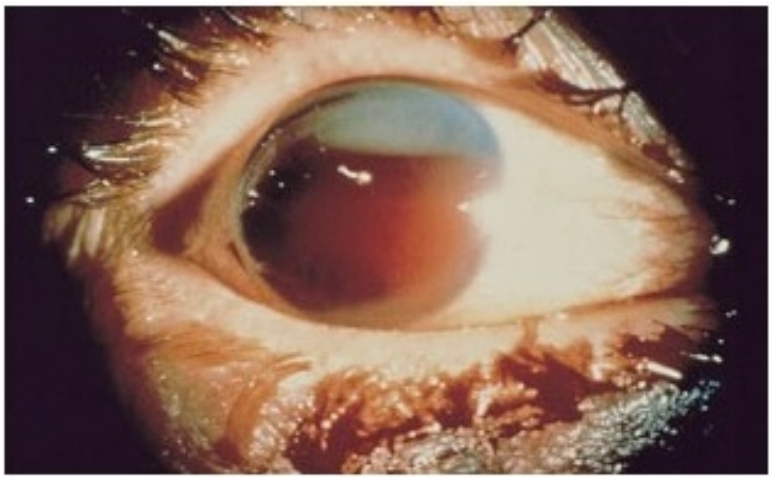


Leukoerythroblastic picture in myelofirbosis

NBME 3

Condylomata acuminata from HPV infection
Risk factor is multiple sexual partners

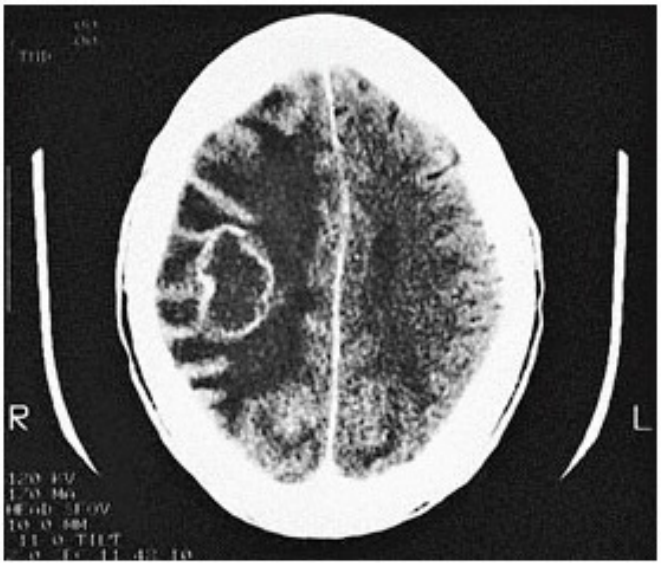
Metastatic carcinoma (lab showed hypercalcemia)



Hyphema due to trauma

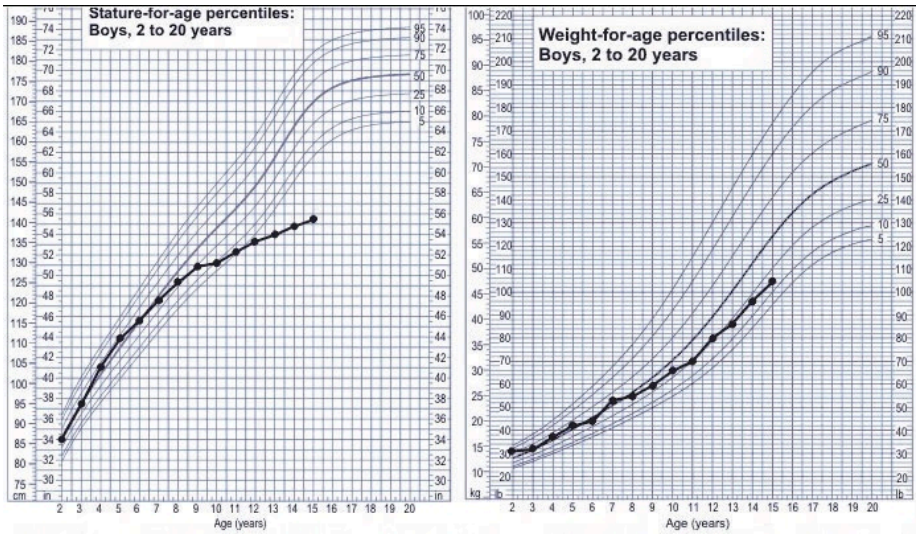
Epidermoid cyst (infected)

Seborrheic keratosis (waxy, stuck on lesion)



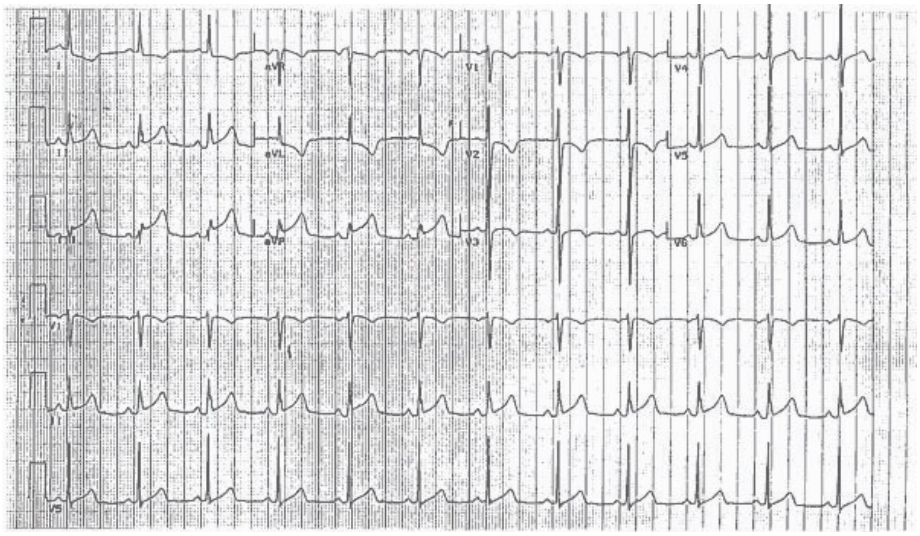
Cerebral toxoplasmosis in HIV patient

NBME 4

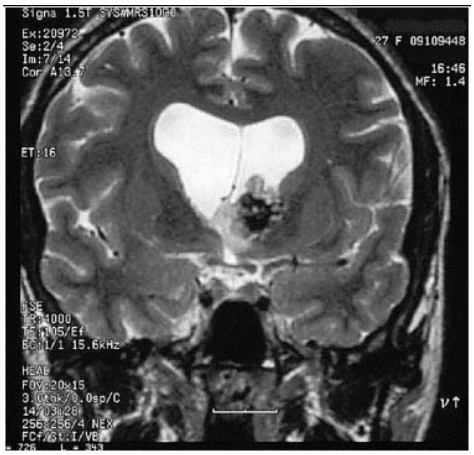


Short stature but normal weight
Can be due to craniopharyngioma

Venous ulcer due to chronic venous stasis

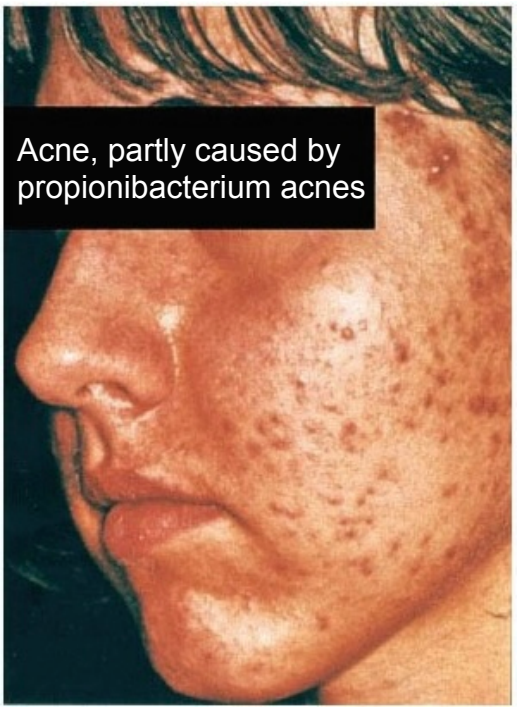


Inferior STEMI (II, III, aVF)



Obstructive hydrocephalus due to tumor

Tinea (pityriasis) versicolor.
Rx: topical selenium sulfide.

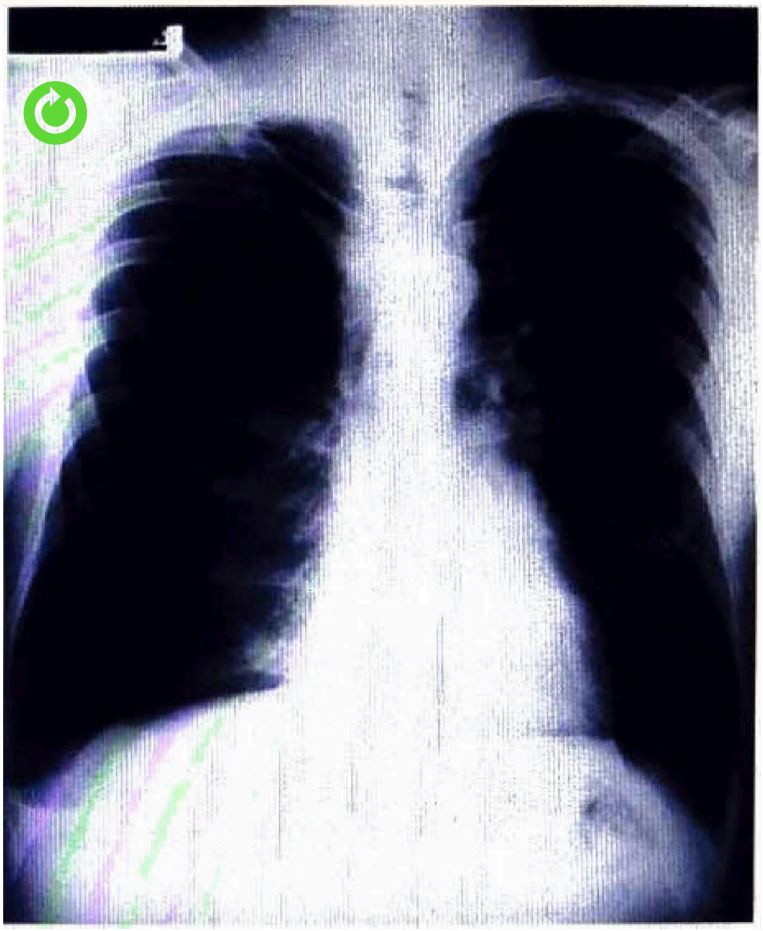


NBME 5

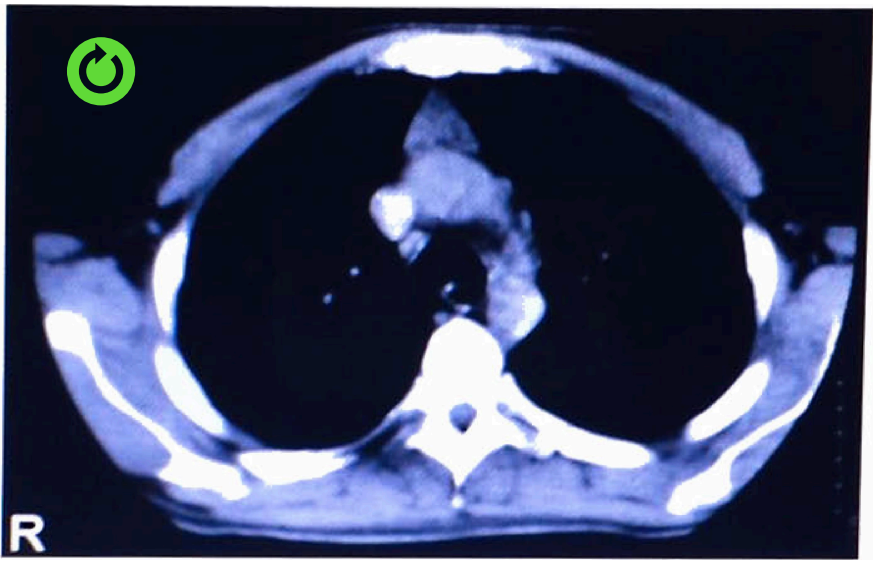
I searched a lot but couldn't find the NBME 5
If you have it, please send to this email so
that I add the images to here.
essentialusmles@gmail.com

NBME 6

Acute allergic contact dermatitis (poison ivy)
Prevent by avoiding the wooded area



Right pneumothorax, treat by tube thoracostomy



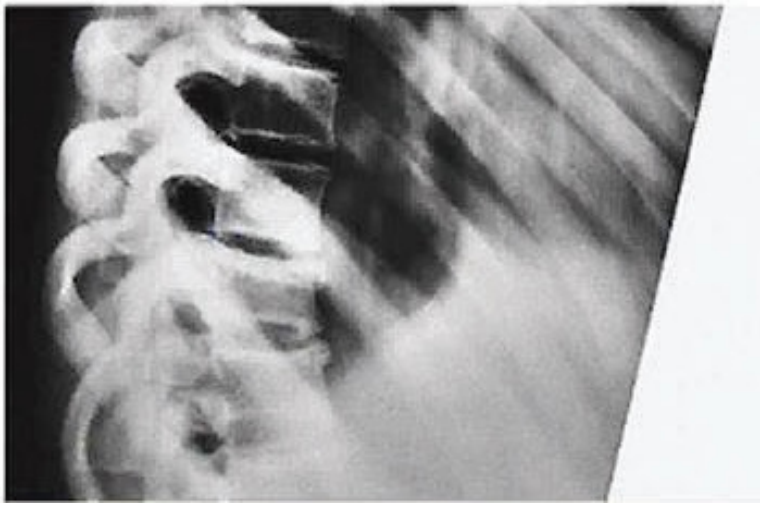
Thymoma (associated with myasthenia gravis)

Benign cystic teratoma

NBME 7

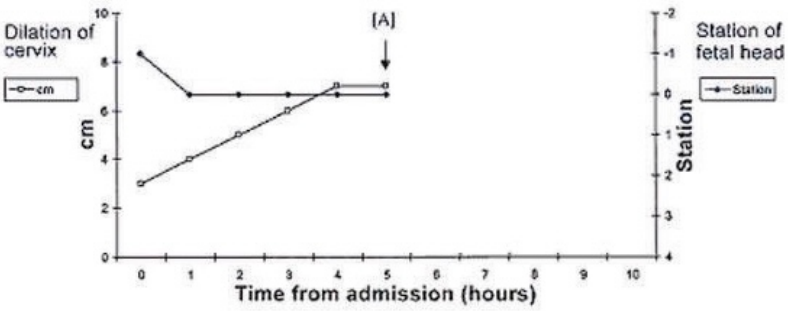
Acne (involves pilosebaceous follicles)

Bamboo spine of ankylosing spondylitis



Vertebral compression fracture (due to steroid induced osteoporosis)

Left hip osteoarthritis



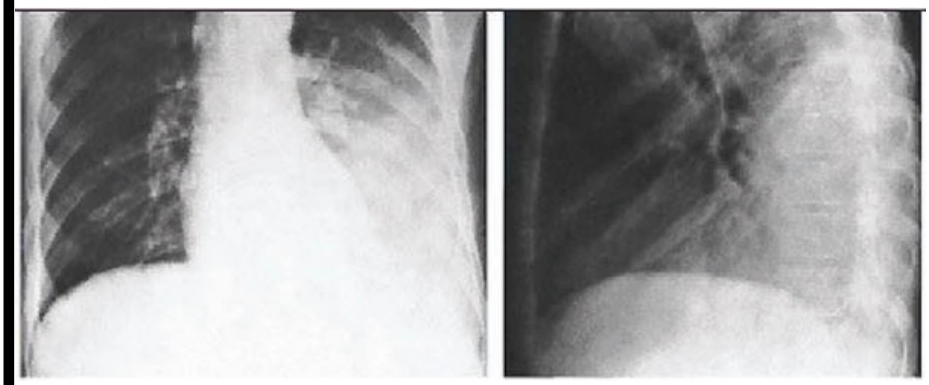
At point A, the lady is in active phase of first stage. If she needs immediate delivery (e.g recurrent late deceleration + absent variability), then it will be done via C/S because cervix has not dilated to 10 cm yet (which if it does then we would go for operative vaginal delivery)

Genital herpes (painful ulcers & lymphadenopathy)

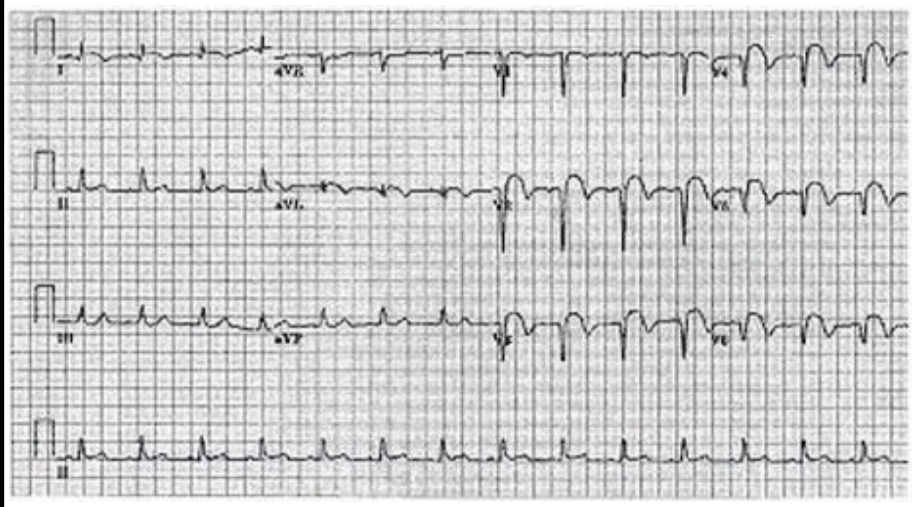
Achalasia barium swallow (bird beak sign). LES tone is increased, esophageal peristalsis is decreased.

Spondylolisthesis

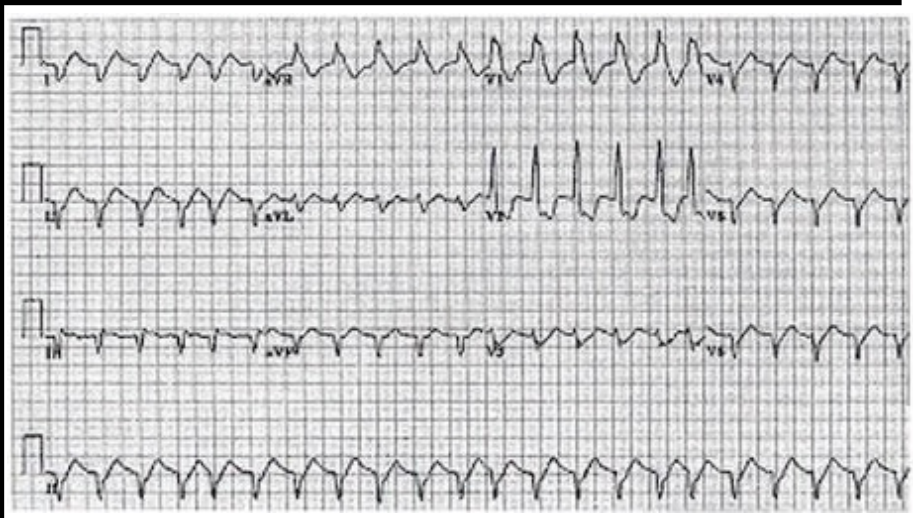
Slapped cheek syndrome (erythema infectiosum due to parvovirus B19). Rx: supportive (no antivirals)



Consolidation (pneumonia) on left lower zone. Can be due to H. Influenzae (gram ⊖ bacilli)



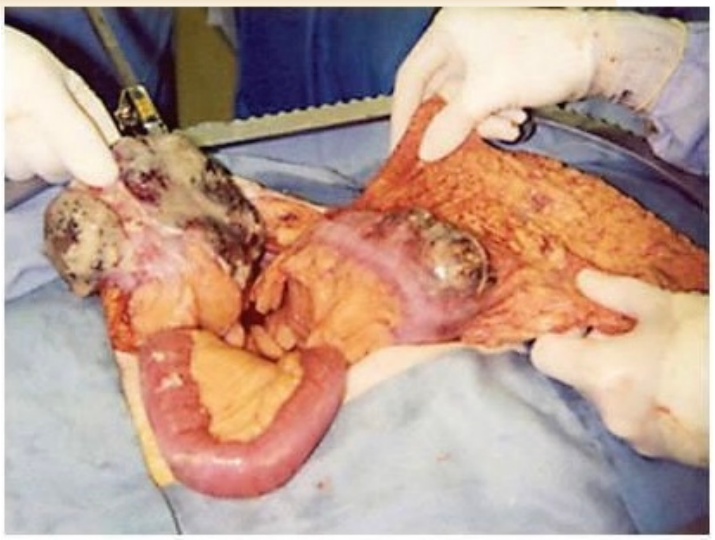
Anterolateral STEMI (I, V2,V3,V4,V5,V6)



Ventricular tachycardia (VT): regular wide QRS tachycardia.

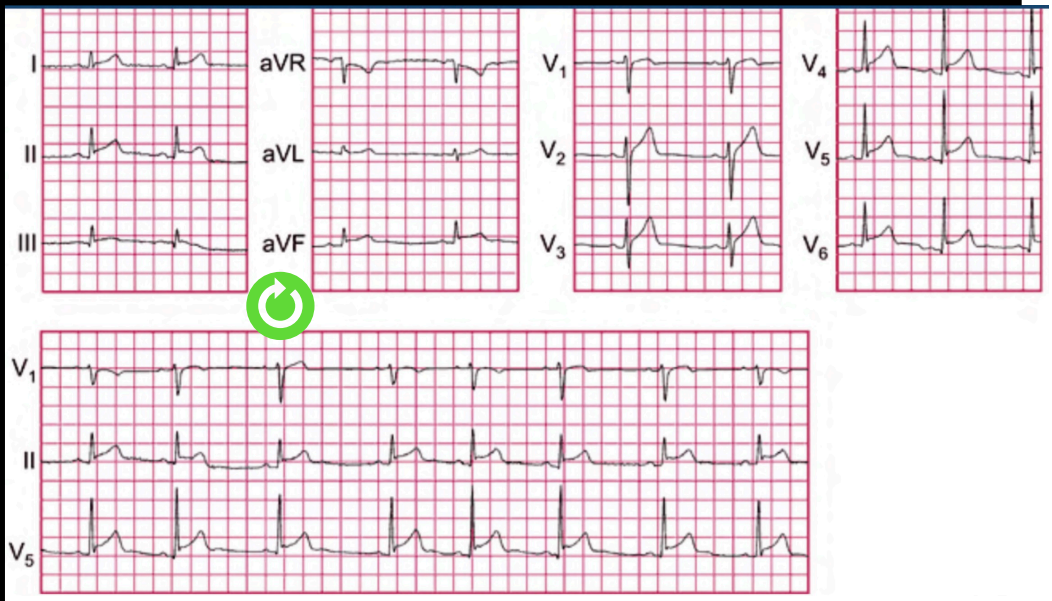
NBME 8

Neuropathic ulcer due to abnormal pressure distribution in diabetic foot sensory neuropathy.

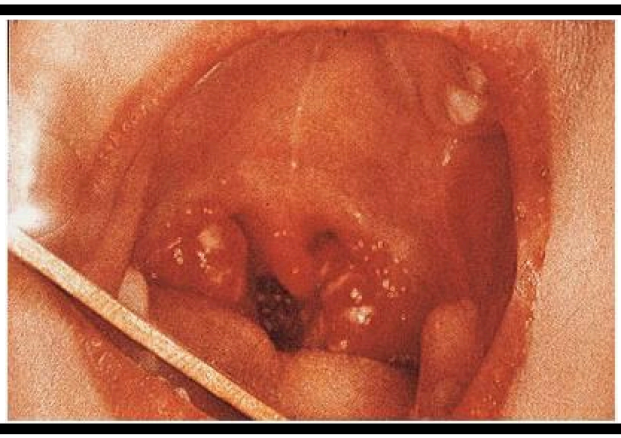


Bowel necrosis due to arterial embolism in the setting of atrial fibrillation.

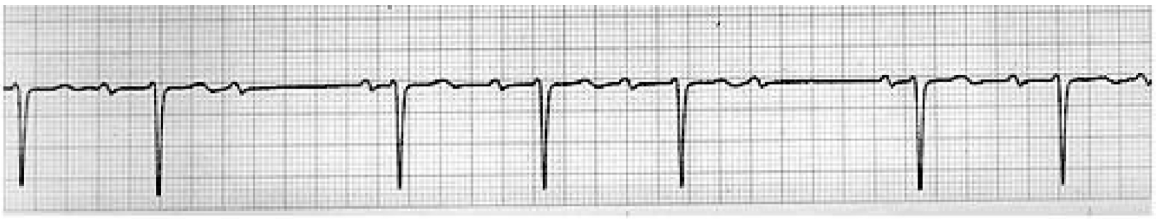
Neonatal intestinal obstruction which could be due to meconium ileus (cystic fibrosis). Patient needs pancreatic enzymes after surgery.



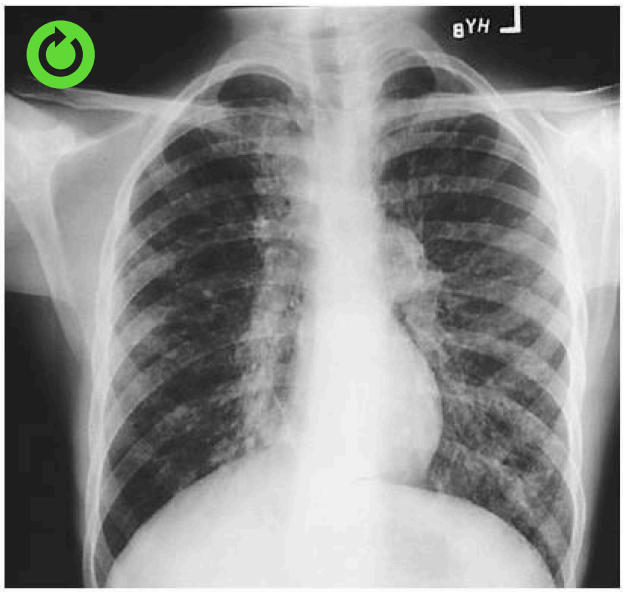
Pericarditis: diffuse ST elevation & PR depression.
Next step: echo to check for effusion.
Rx: NSAID (as ibuprofen) + colchicine.



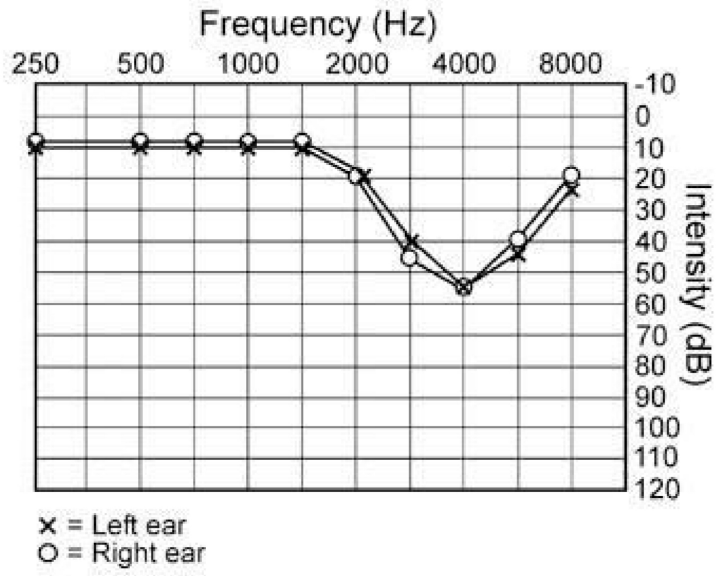
Tonsillitis / Pharyngitis, can be due to infectious mononucleosis (EBV)



Second degree (Mobitz type 1) heart block.



Bronchiectasis CXR, can be due to cystic fibrosis or recurrent respiratory infections

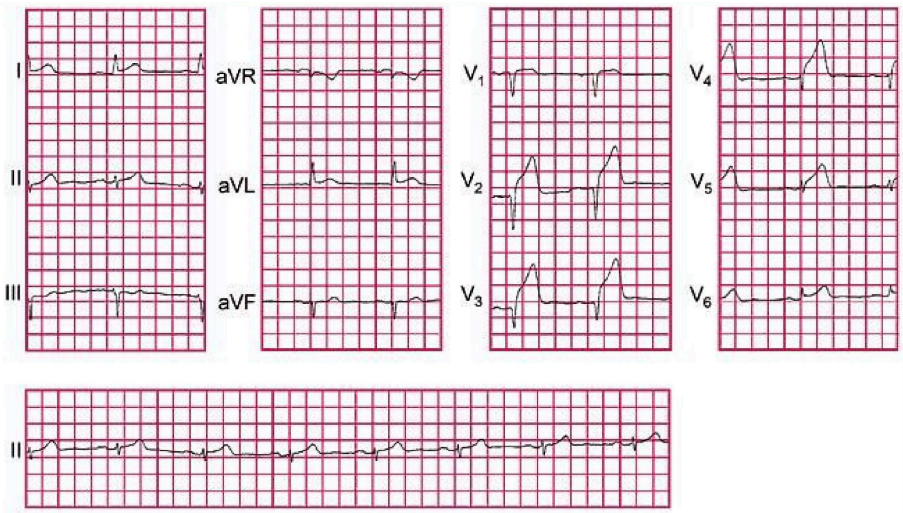


Bilateral high frequency hearing loss due to exposure to high-decibel sound.

ICH with IVH, usually due to HTN.

Left side SCFE
Rx: surgical pin fixation

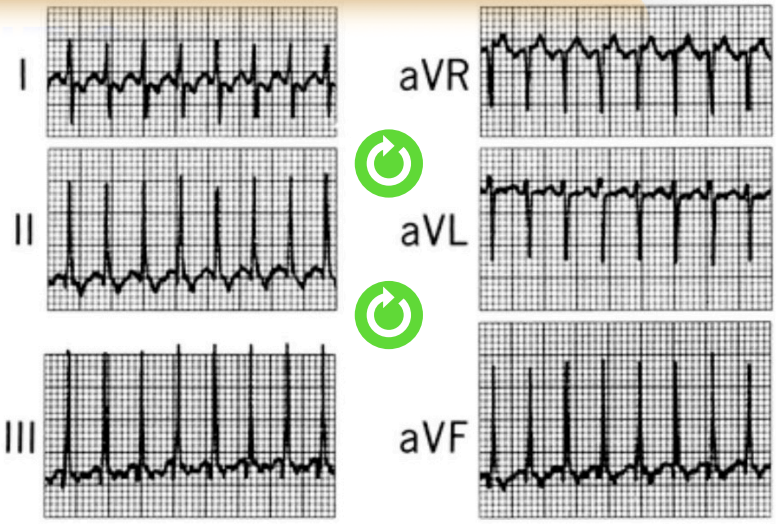
Normal thymus (sail sign) in children.



Anterolateral STEMI (I, aVL, V2, V3, V4, V5, V6)

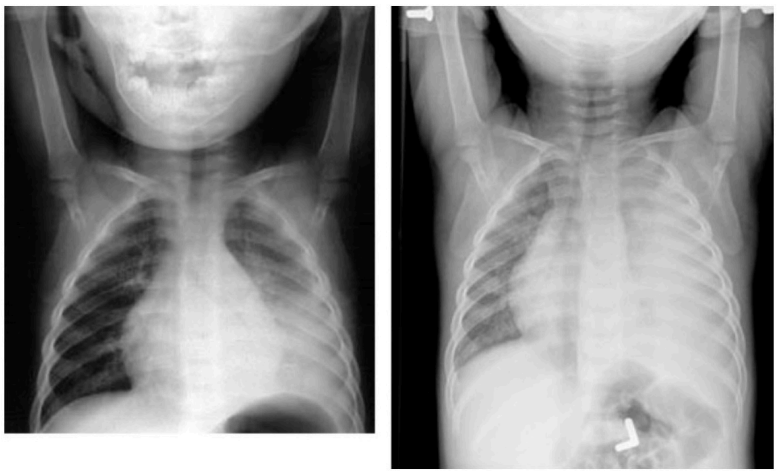
NBME 9

Candida diaper rash: red, macerated thin plaques with satellite papules.
Rx: topical antifungals like nystatin.

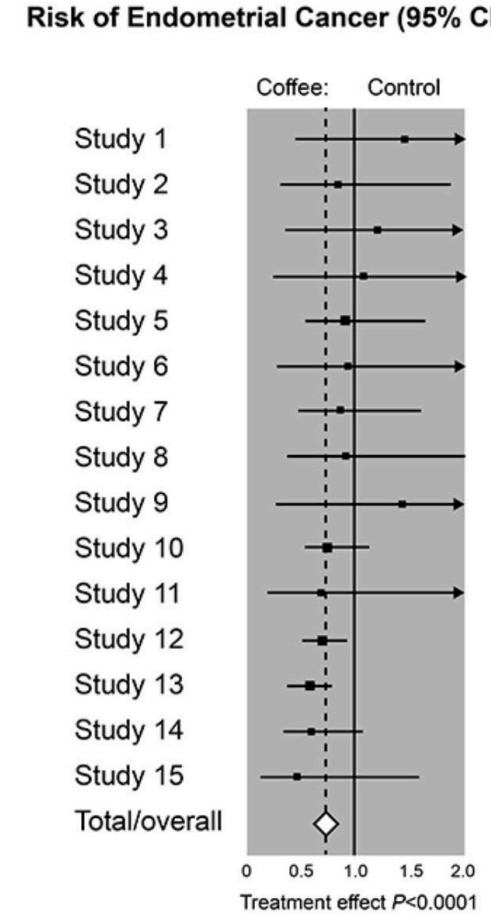


SVT (regular narrow complex tachycardia)
Rx: Stable → vagal maneuvers or adenosine.
Unstable → electerical cardioversion.

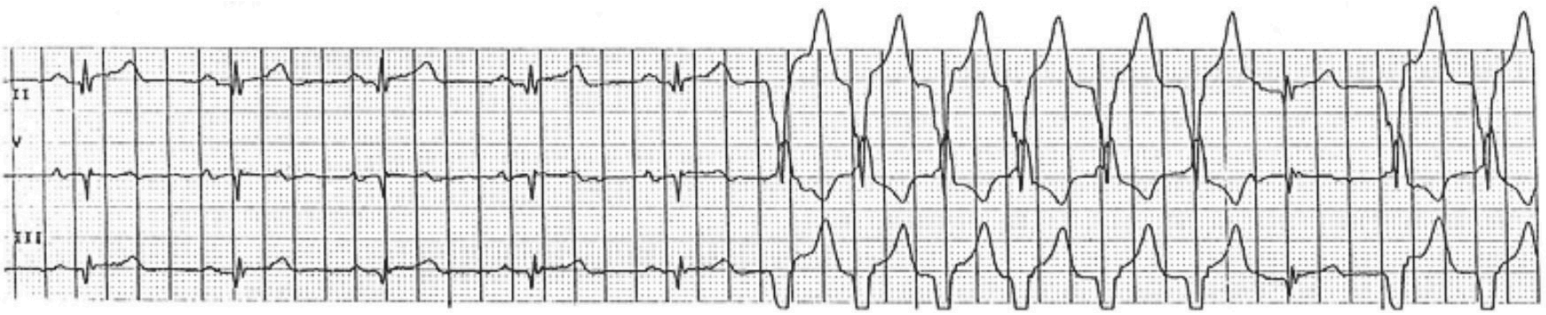
Foreign body near 3rd MTP joint (in a patient with diabetic foot). Diabetic foot injury & ulcer is best prevented by wearing shoes when standing and walking.



Pneumonia on left. Can be caused by X-linked agammaglobulinemia.
Rx: IV antibiotics & IVIG therapy.



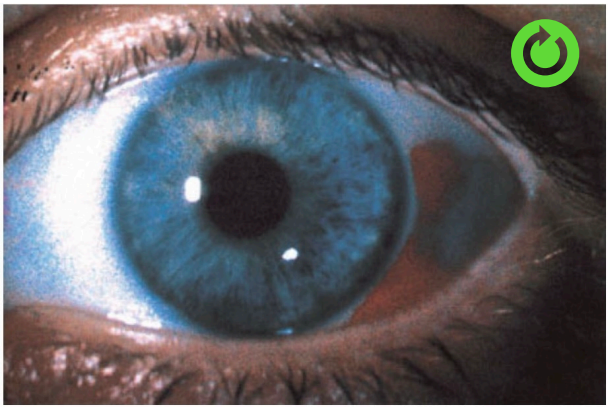
This is a forest plot, used in meta analysis.
Squares are OR or RR of individual studies with horizontal line indicating 95% CI.
The diamond is the combined result of all studies (less than 1 → decreases the risk)
P value <0.05 so it is statistically significant



Ventricular tachycardia

Tinea capitis due to Trichophyton tonsurans

Glioblastoma: ring enhancing lesion with central necrosis that crosses the midline.



Subconjunctival hemorrhage
Reassure (it is benign)

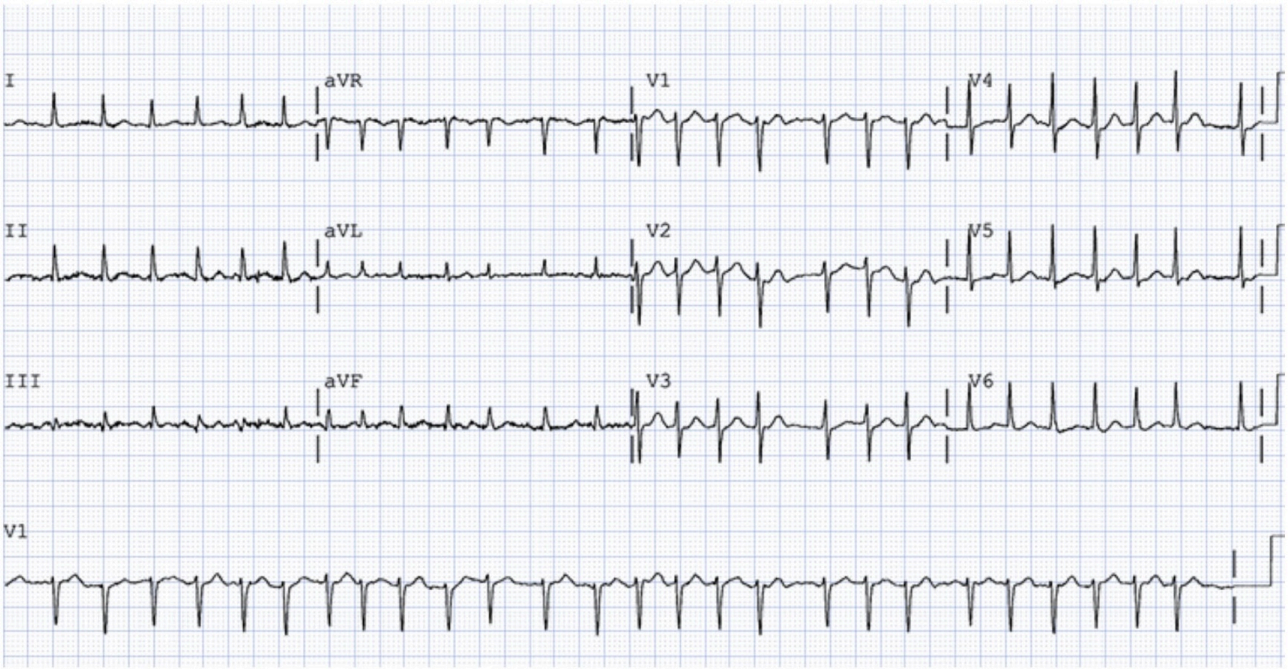
Hereditary hemorrhagic telangiectasia

Stevens-Johnson syndrome: confluent dusky erythema with desquamation.
Rx: intensive support & wound management in a burn unit.

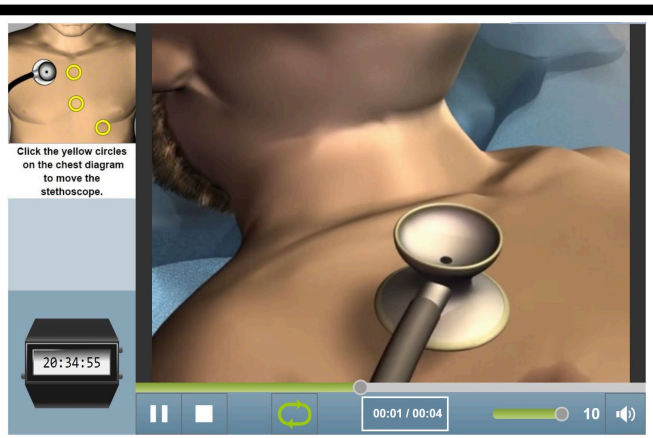
Xanthelasma caused by hyperlipidemia

Osteosarcoma: irregular, ragged borders & destructed bone of upper humerus. Need MRI

Normal knee x-ray. Pain of SCFE can radiate to knee so it needs x-ray of hip for diagnosis



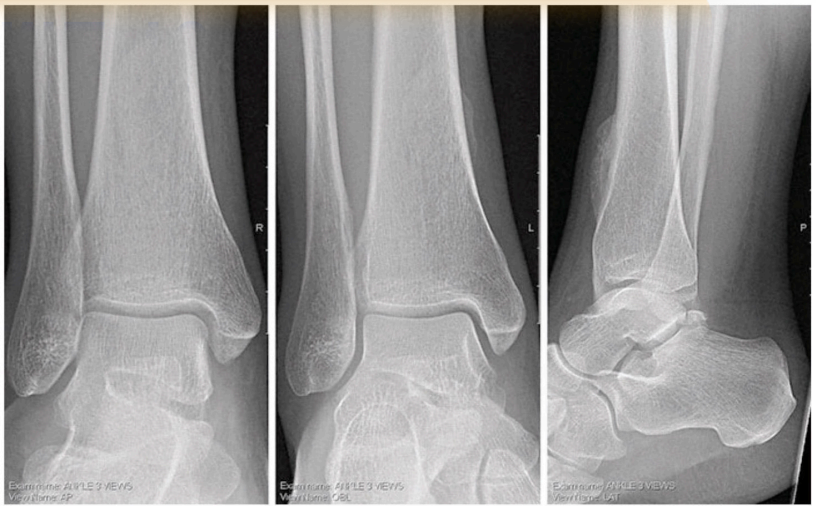
Atrial fibrillation: no P waves, irregular, narrow-complex tachycardia.
Rx if unstable: synchronised cardioversion.



This exact case is repeated in multiple NBME (link): Accessory sounds from the upper airway (eg, congestion due to viral URTI) may be transmitted through the respiratory tract and heard on auscultation. These can be distinguished from pulmonary or cardiac sounds by listening with one earpiece of stethoscope, permitting one-sided chest auscultation and correlation with external, ambient breath sounds from the patient in the non-auscultating ear.

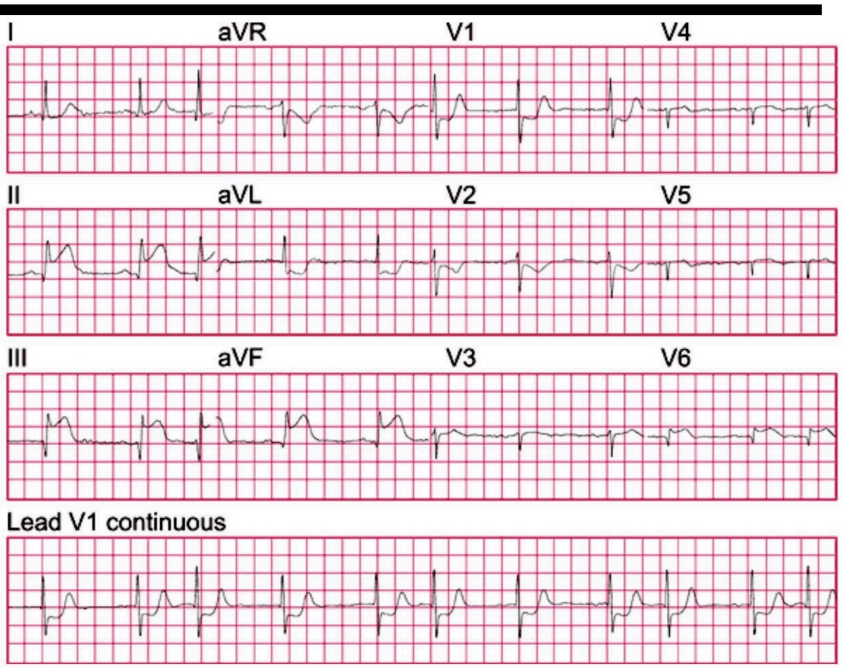
NBME 10

HSV encephalitis (temporal lobe).
Dx by PCR on lumbar puncture.



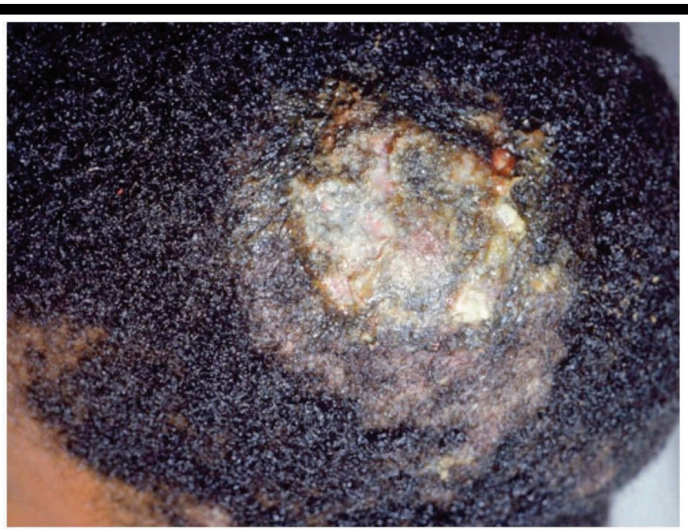
Osteosarcoma (sunburst periosteal reaction).
Next step: MRI then bone biopsy.

Venous ulcer due to venous insufficiency

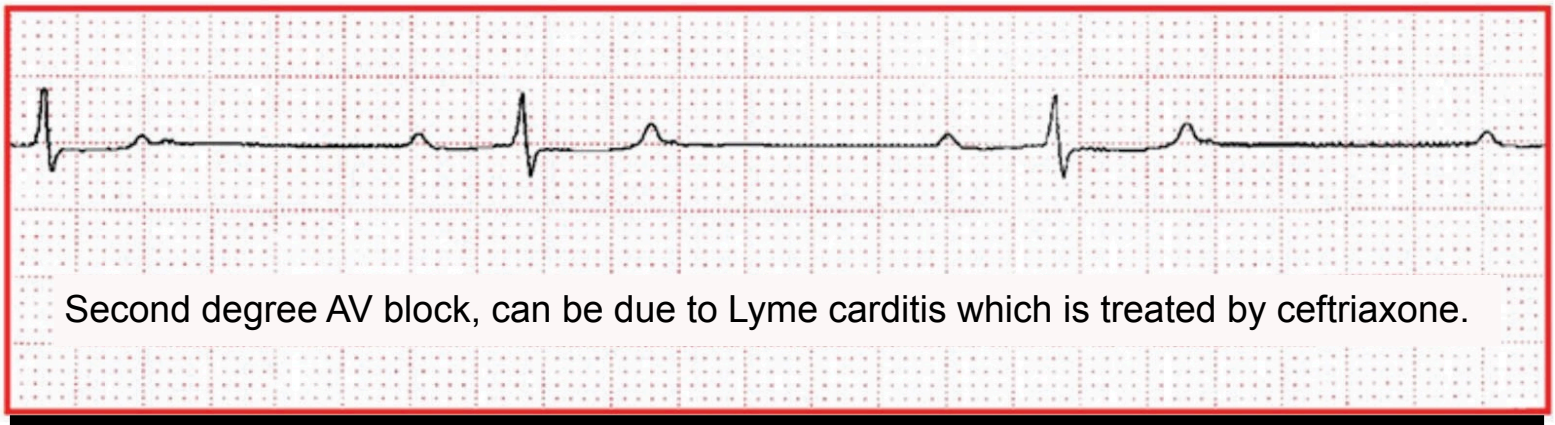


Inferior STEMI (II, III, aVF). Nitroglycerin is contraindicated if there is RV-MI or hypotension.

Pterygium, recommend to wear sunglasses

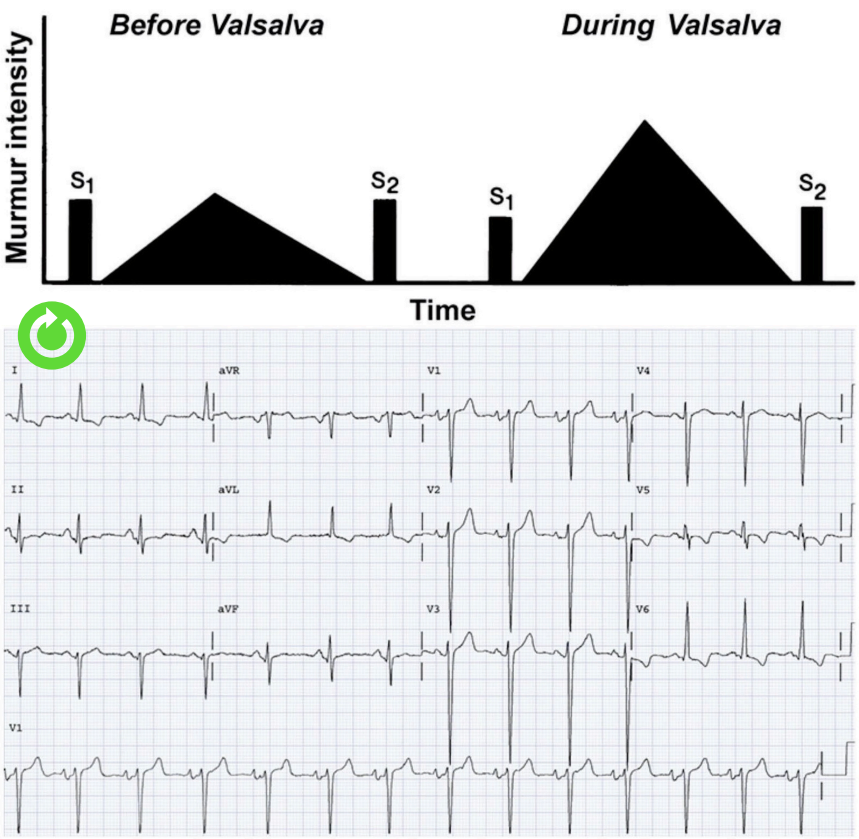


Tinea capitis due to Microsporum gypseum



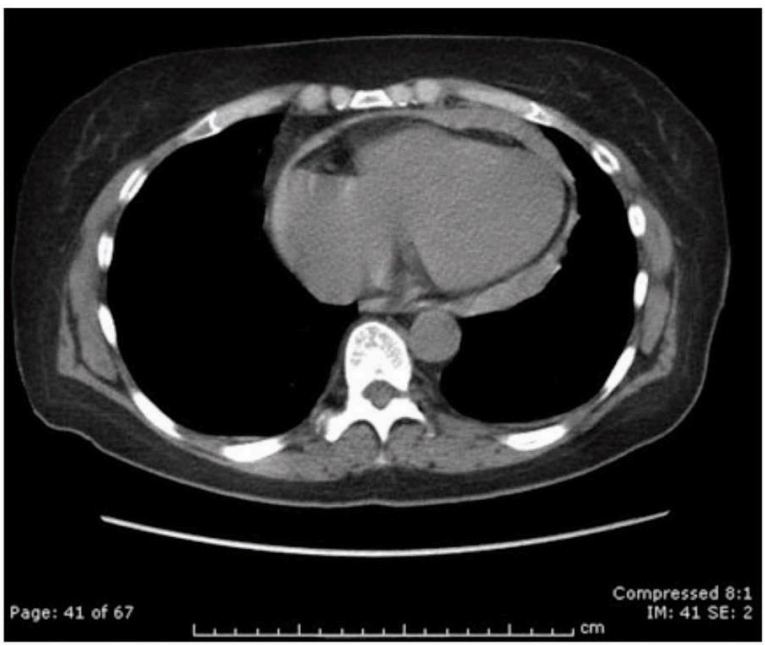
Second degree AV block, can be due to Lyme carditis which is treated by ceftriaxone.

OA (joint space narrowing).
First line Rx: acetaminophen.

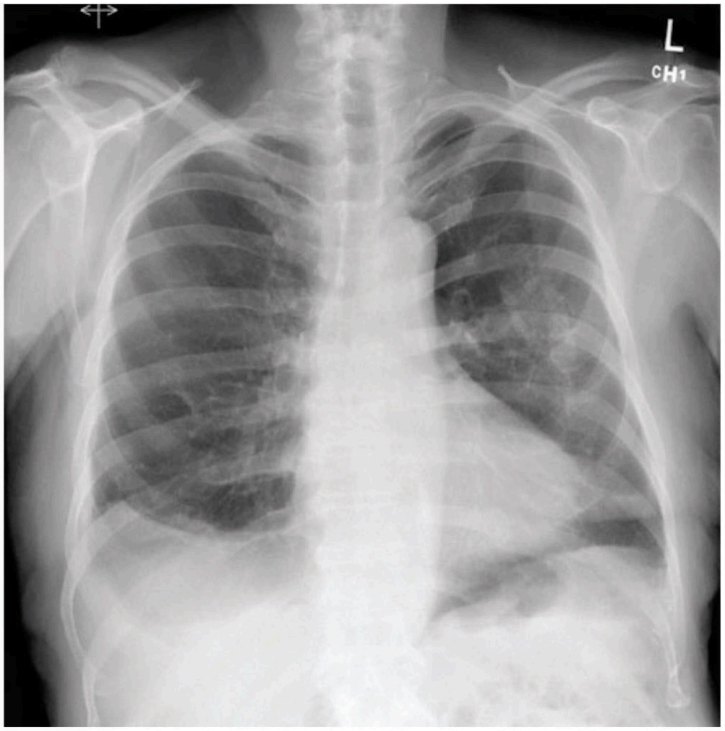


HOCM: Systolic crescendo-decrescendo murmur that becomes louder with valsava.
ECG criteria of LVH (large S in V1, V2, large R in V6).

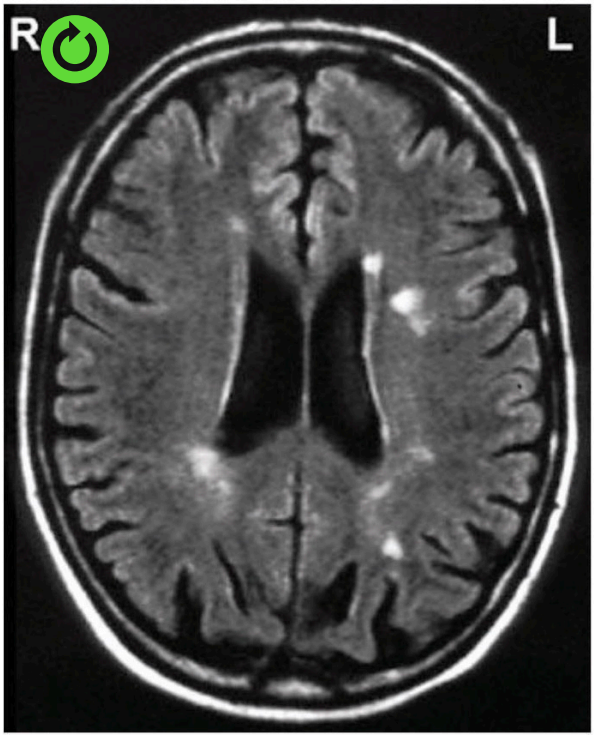
Leishmaniasis



Pericardial effusion → do echocardiography



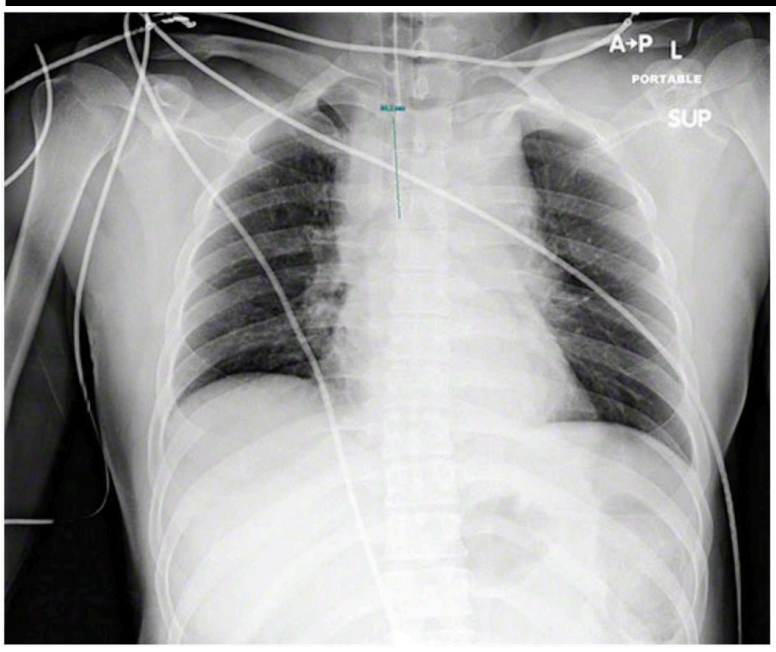
Right pleural effusion.
If it is small & asymptomatic in the course of a resolving pneumonia on treatment, no need for additional tests like thoracentesis.



Multiple sclerosis plaques on MRI.
Rx: Steroids for acute flares.
Interferon-β, monoclonal antibodies or glatiramer to prevent relapse.

Anencephaly, prevented by folic acid

Tinea (pityriasis) versicolor.
Rx: topical selenium sulfide

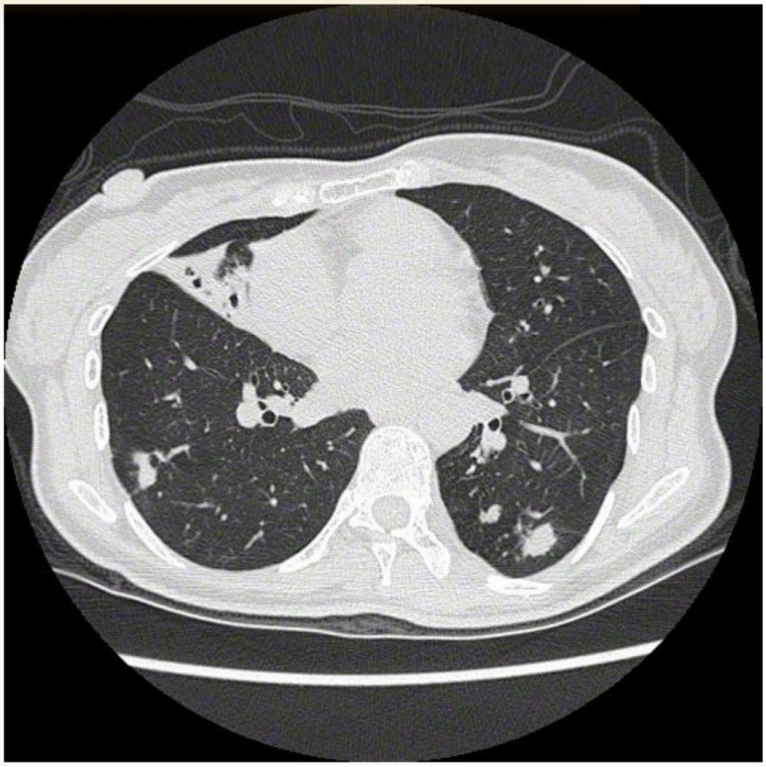


Traumatic aortic dissection:
CXR: widened mediastinum.
Dx by CT angiography of chest.

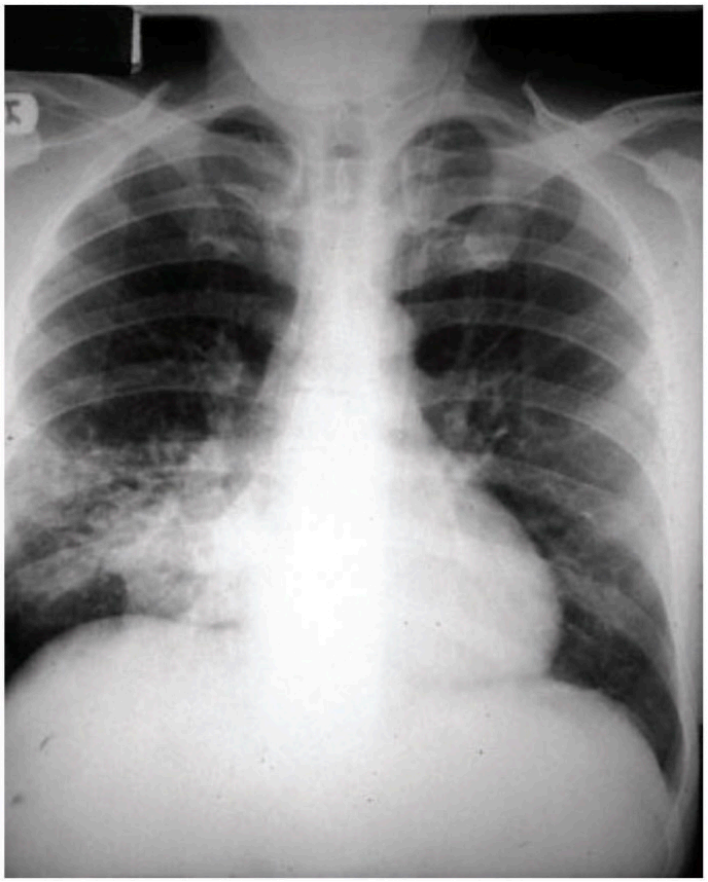
Large deep diabetic foot ulcer with tendon/bone exposure. Next step: x-ray to detect osteomyelitis or gas in soft tissues

Atrial fibrillation: no P waves, irregular, narrow-complex tachycardia.
It doesn't need specific intervention if patient is stable & ventricular response is not rapid.

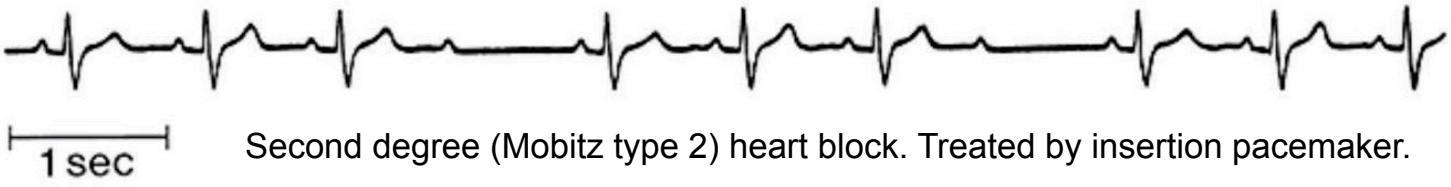
Measles (confluent maculopapular) rash.
Can occur secondary to measles vaccine but it would lack other typical fractures of measles.



Mycobacterium avium complex (MAC) disease: CT shows bronchiectasis (predisposing factor), Multiple nodules in middle & lower lobes.



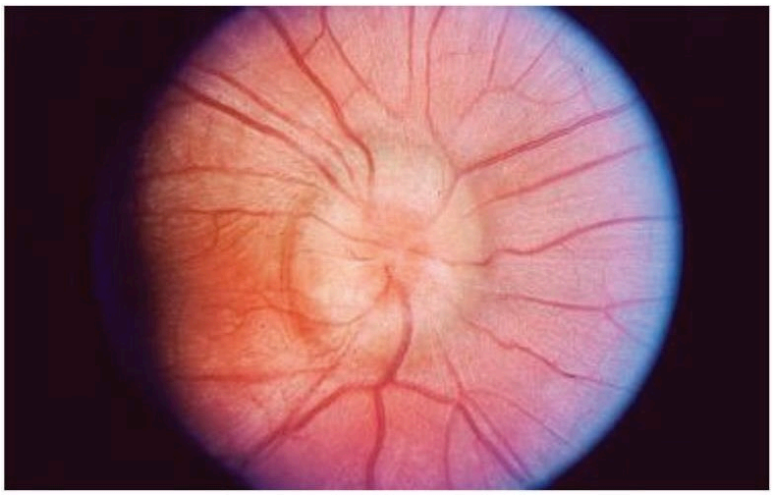
Consolidation (pneumonia) on right lower zone.
Rx: oral azithromycin, doxycycline or amoxicillin



Second degree (Mobitz type 2) heart block. Treated by insertion pacemaker.

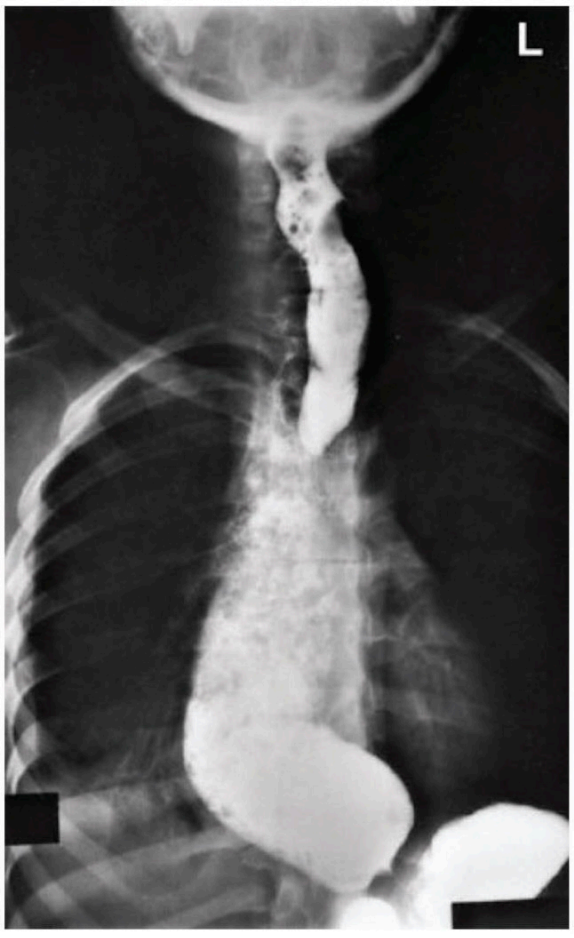
Supraventricular tachycardia (SVT: regular narrow complex tachycardia with no P waves)

ABCDE of malignant melanoma. This subtype is acral lentiginous melanoma that develops on fingers/toes, unrelated to sun exposure.

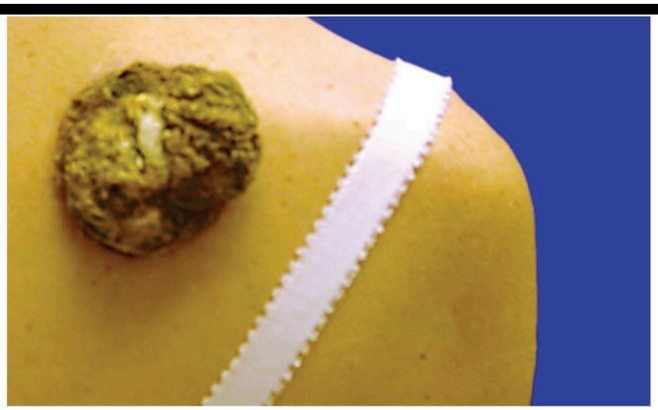


Papilledema (can be due to idiopathic intracranial hypertension which needs CT & Lumbar puncture for diagnosis).

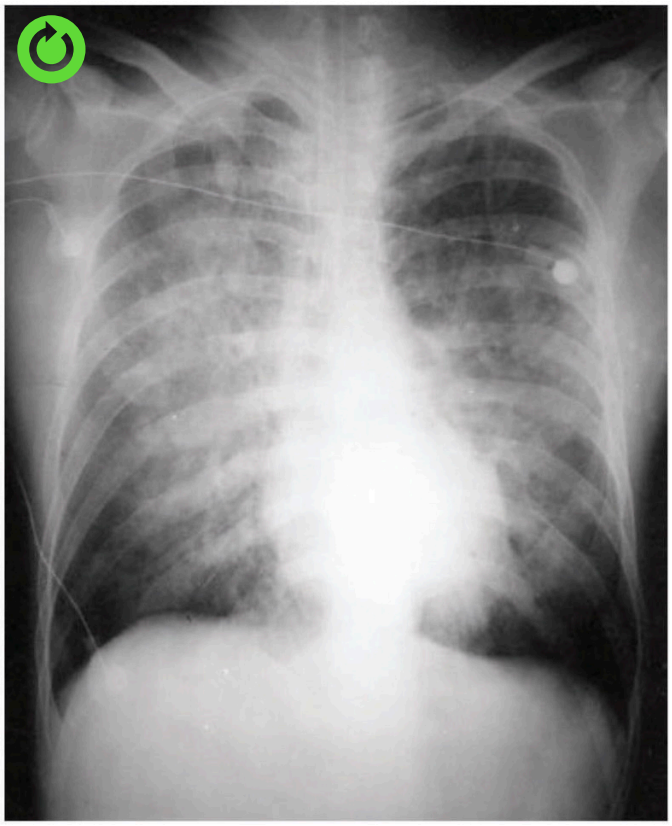
Malar rash of SLE.
Lupus pleuritis is treated by NSAID as ibuprofen.
Lupus nephritis must be biopsied for treatment.



Achalasia barium swallow (bird beak sign: dilated esophagus with distal taper)

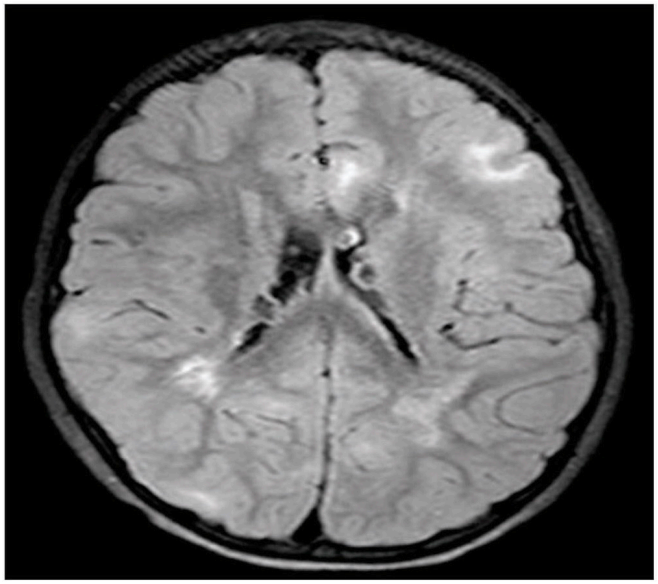


SCC of skin. The risk is increased by immunosuppression (unlike BCC & melanoma)



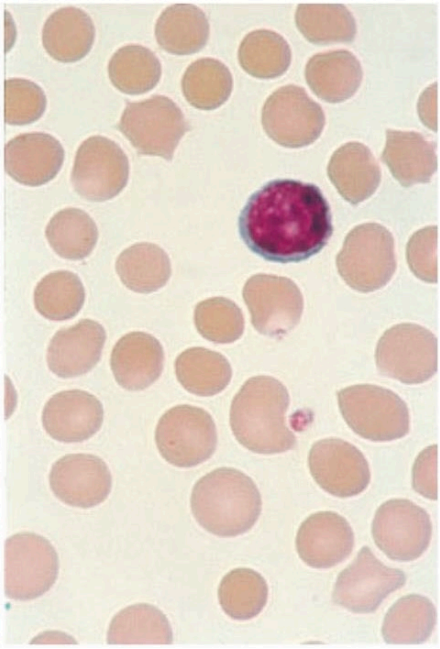
ARDS: bilateral pulmonary infiltrates

Macule (dermatitis) of disseminated gonococcal infection. Other findings are septic polyarthritis and tenosynovitis.



Brain MRI of tuberous sclerosis (cortical tubers, subependymal nodules) which can also cause ash-leaf spots & cognitive delay.

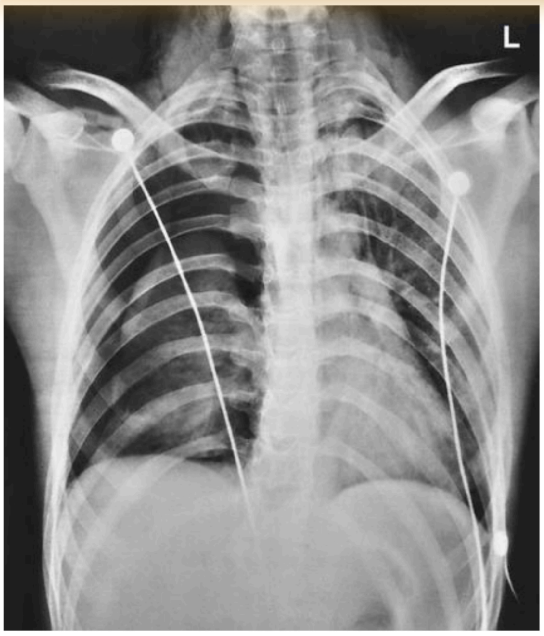
Hereditary spherocytosis
Rx: splenectomy



Impetigo (papule-vesicle with honey crust).
Rx: topical mupirocin.

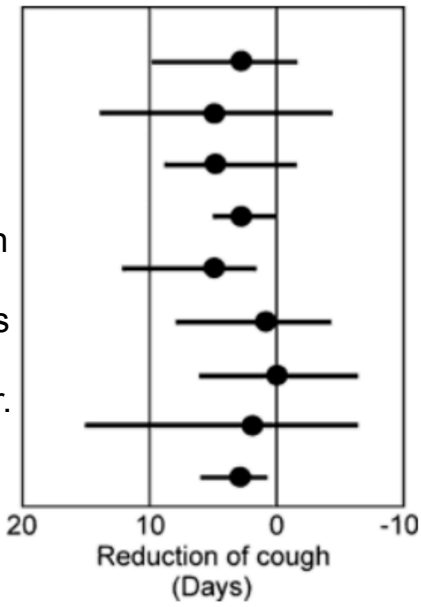
R Right side orbital cellulitis L

NBME 12



Right pneumothorax, treat by tube thoracostomy

Forrest plot of meta-analysis which has more sample size than each of it's individual studies. This increases the power & reduces the risk for type II error.

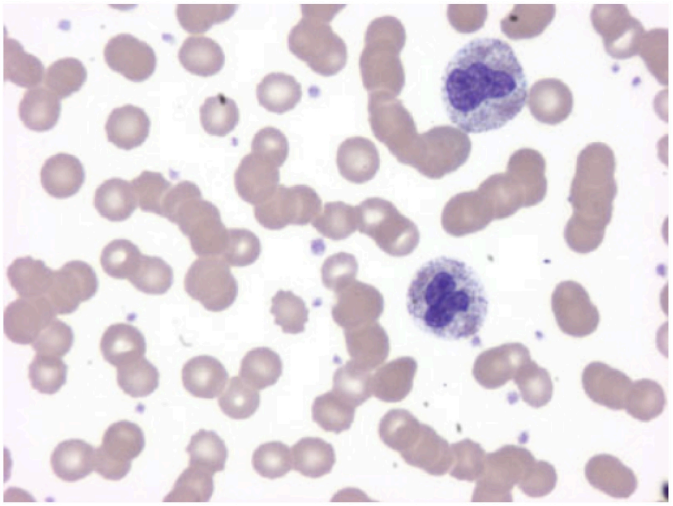


Neurofibromatosis-1, needs yearly ophthalmologic examination

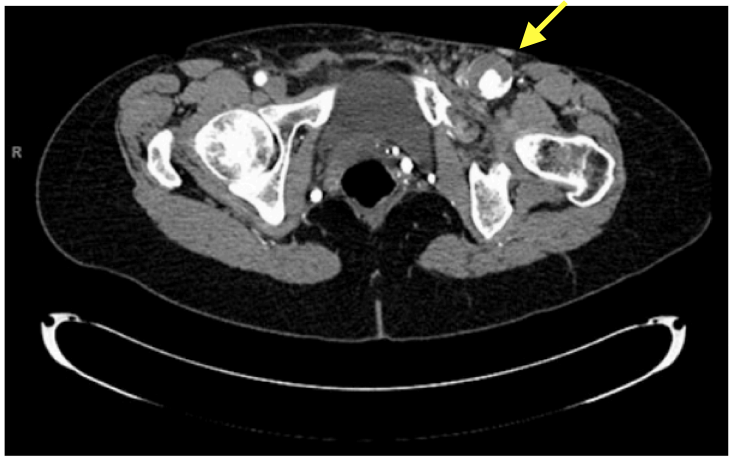
Bronchiectasis, can be due to primary ciliary dyskinesia.

Left SCFE, needs surgical stabilization (vignette incorrectly described symptoms on right hip)

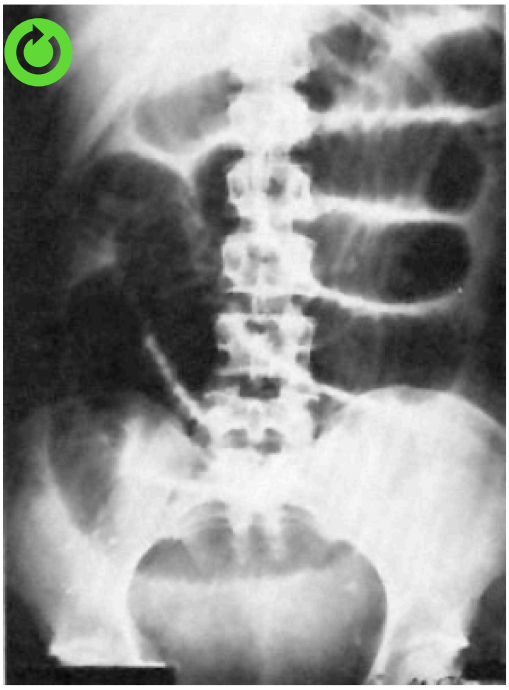
Seborrheic keratosis (doesn't need any diagnostic studies)



Rouleaux formation of multiple myeloma.
Dx by bone marrow biopsy

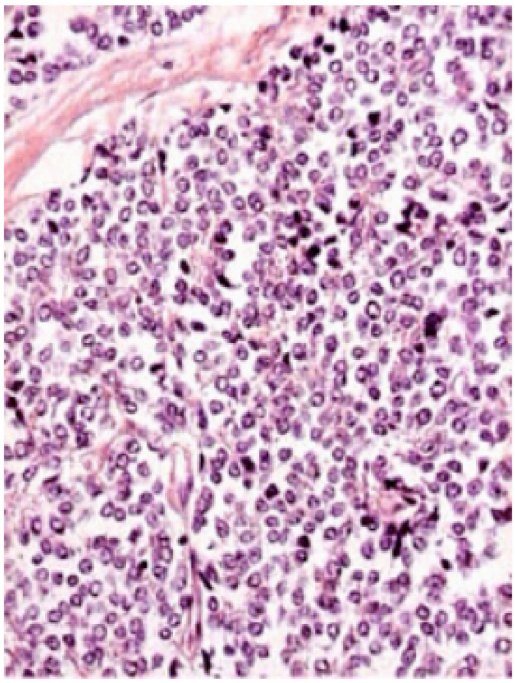


Femoral artery aneurysm with intraluminal thrombus. It can lead to acute limb ischemia.
Rx: Surgical arterial repair.



Small bowel obstruction

Urticaria (when accompanies anaphylaxis, needs immediate treatment by epinephrine)

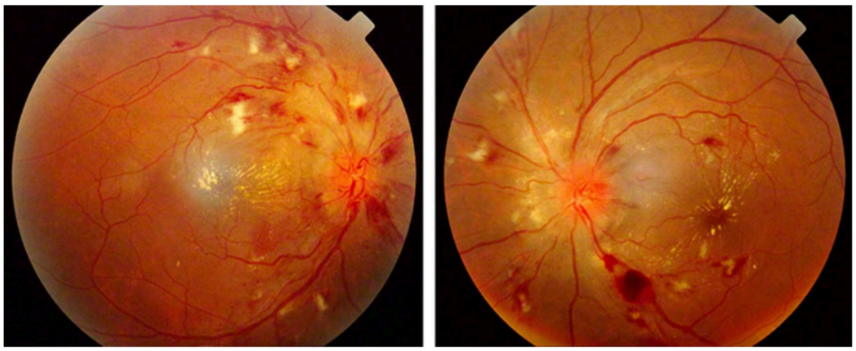


Ewing sarcoma: multiple small, round, blue cells.

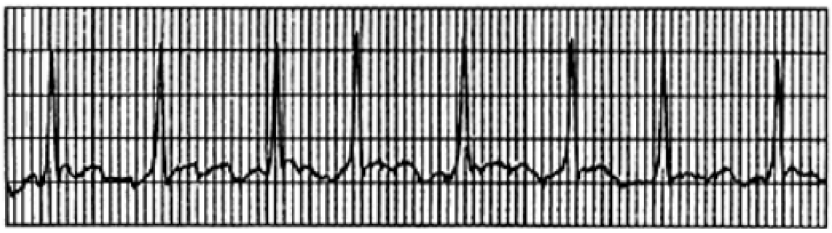
Acute chest syndrome of sickle cell disease (new lower lobe infiltrates).
Check blood culture & start empirical antibiotics.

Pityriasis rosea (herald patch)

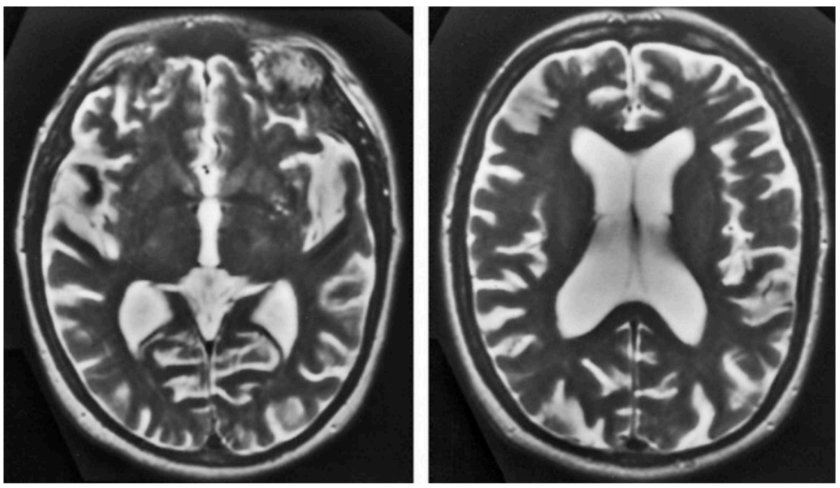
Chronic venous insufficiency (it is a clinical diagnosis & doesn't need additional studies)



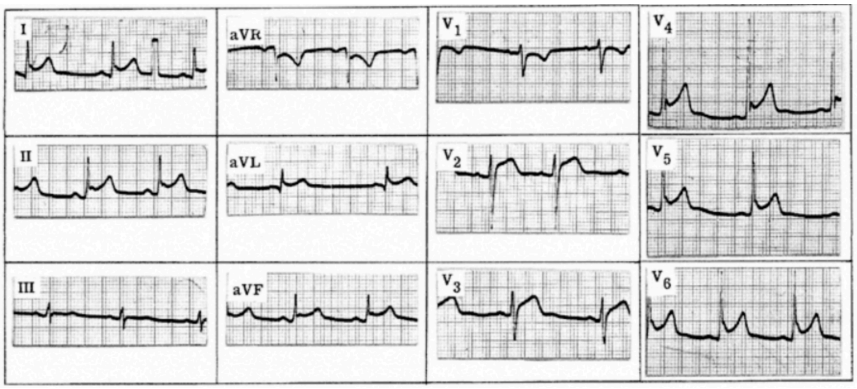
Severe hypertensive retinopathy: retinal hemorrhages, nerve fiber infarctions, hard exudates with macular star configuration, and bilateral optic disc edema.



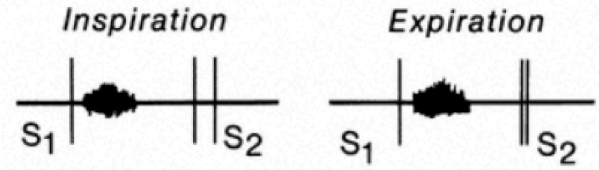
Atrial fibrillation



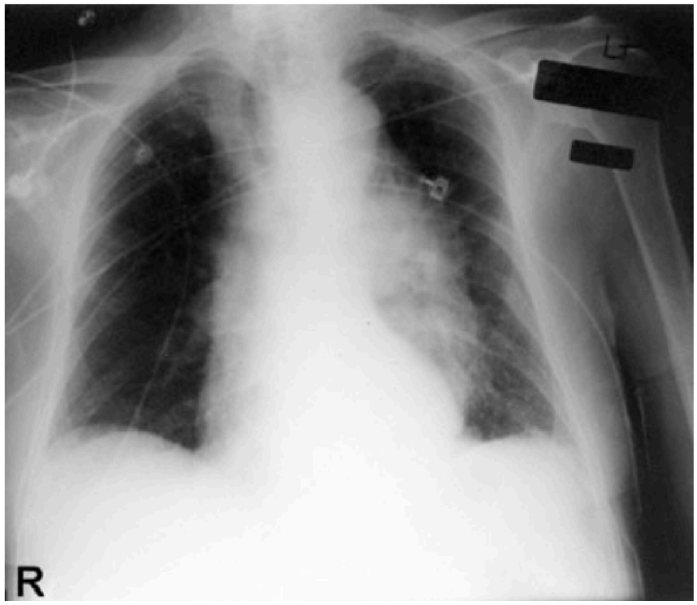
Ex vacuo ventriculomegaly due to Alzheimer disease
Rx: cholinesterase inhibitors.



Pericarditis: diffuse ST elevation & PR depression.
Do echocardiography to check for effusion.



Benign (innocent) murmur: mid-systolic, low grade.
it doesn't need additional evaluation when there are no signs, symptoms and risk factors for cardiac diseases.



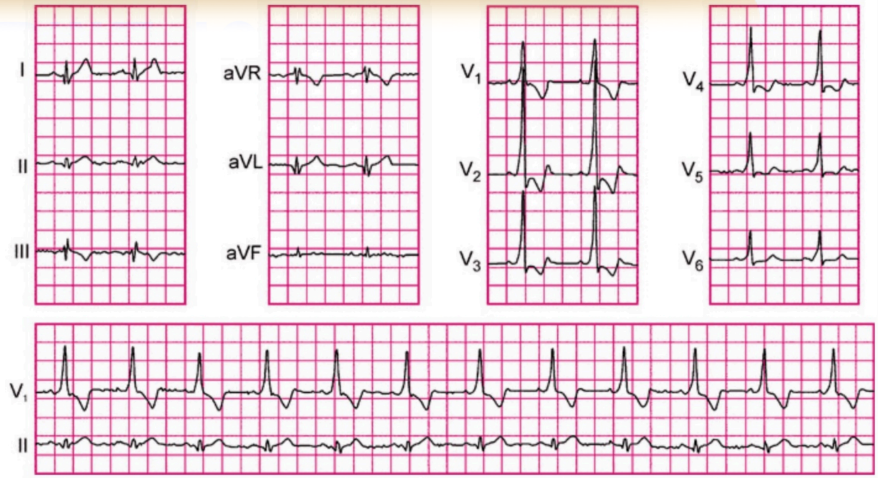
Traumatic aortic disruption: wide mediastinum

Foreign body aspiration: right side hyperinflation with mediastinal shift to left.

Chondrocalcinosis of pseudogout.
Rx: NSAIDs (as ibuprofen).

NBME 13

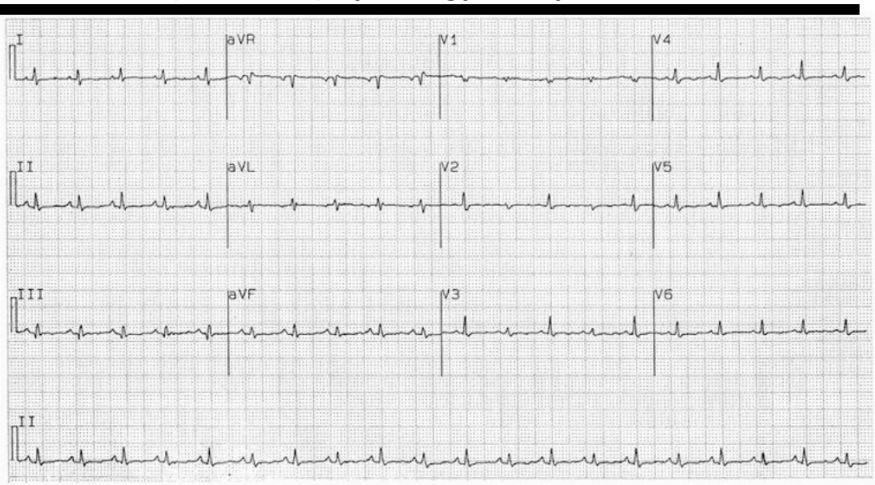
Mucormycosis: broad based non-septaqte hyphae.
Rx: amphoterecin B and debridement

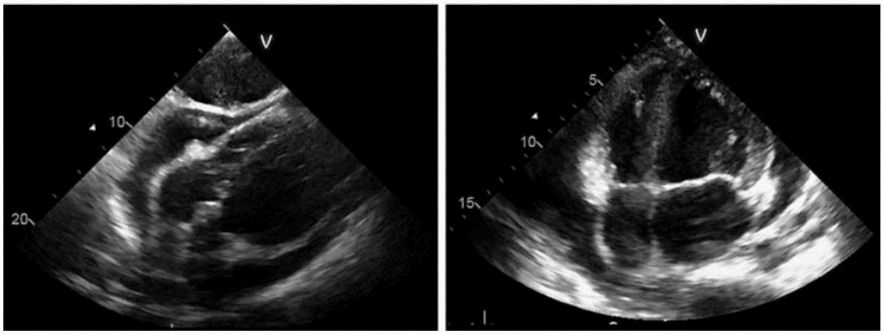


WPW syndrome: short PR, Delta wave, wide QRS.
Next step: electrophysiology study.

R L

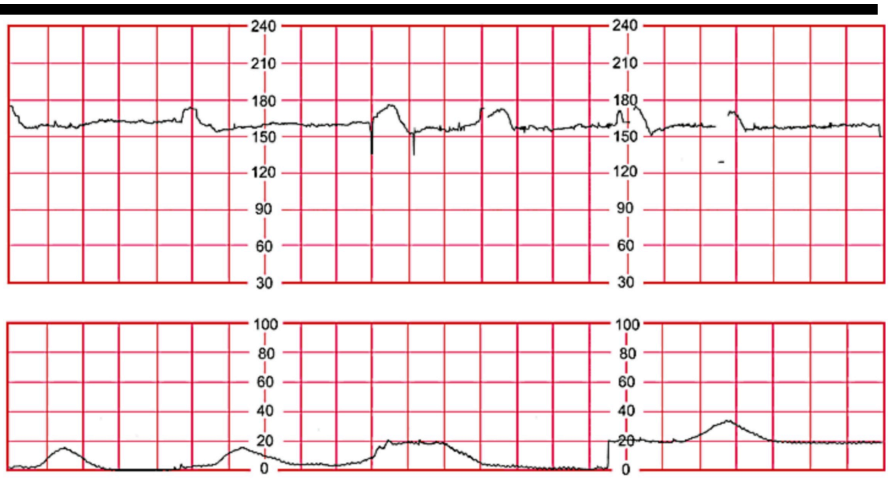
Interstitial opacifications of interstitial lung disease



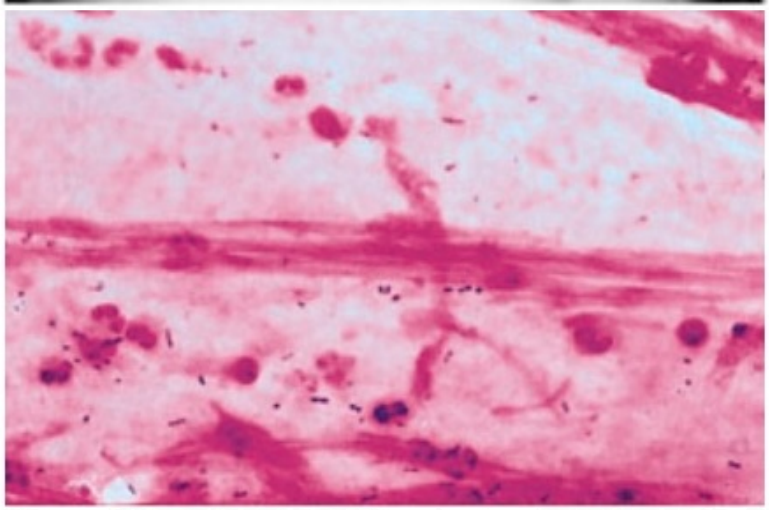


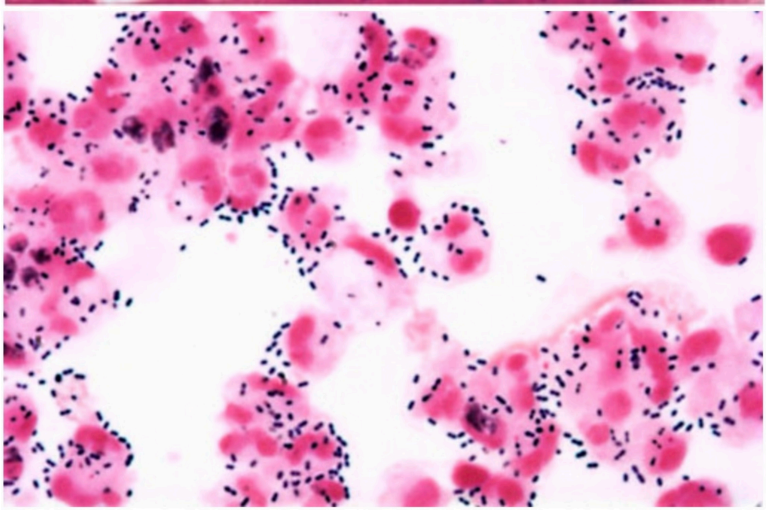
ECG: low voltage QRS, electrical alternans.
Echo: fluid in pericardial space (effusion)

Pelvic organ prolapse (e.g cystocele causing incontinence)



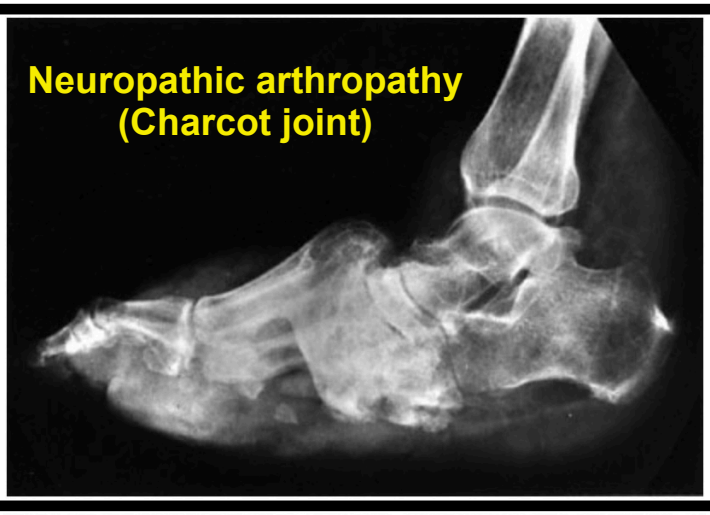
Accelerations → normal labor





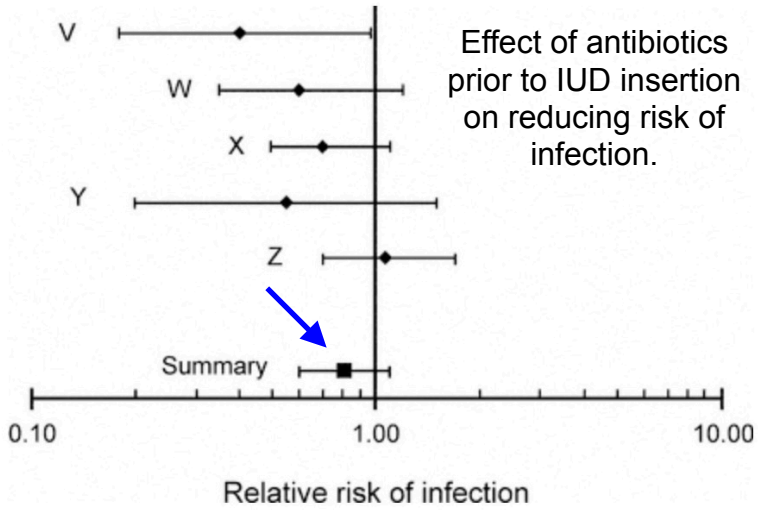
S. pneumoniae: gram⊕(purple) cocci in chains.
- Most common cause community acquired pneumonia (consolidation on left lower zone).
- Most common cause of bacterial meningitis after neonatal period.

Pityriasis rosea (need observation only)



Osteosarcoma: periosteal reaction & disorganized osteogenesis. Next step: MRI then bone biopsy.

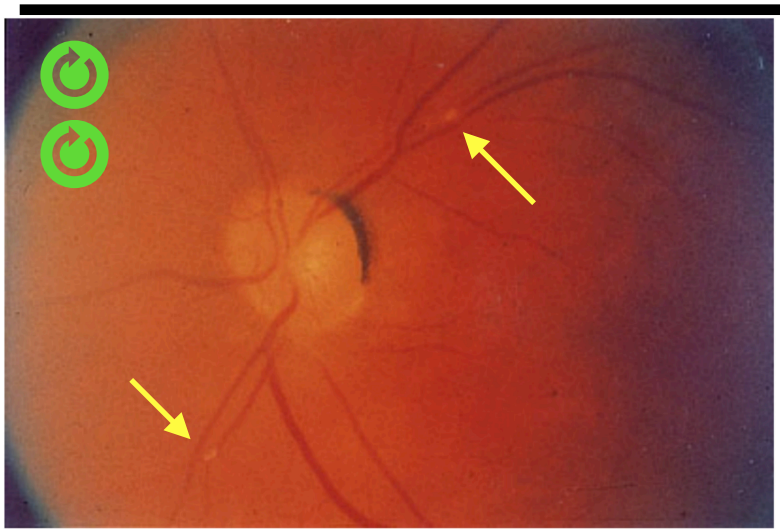
Toxic megacolon (dilated bowel) which could be due to C. difficile with loperamide.
This image in Surgery-CMS-8 is sigmoid volvulus.



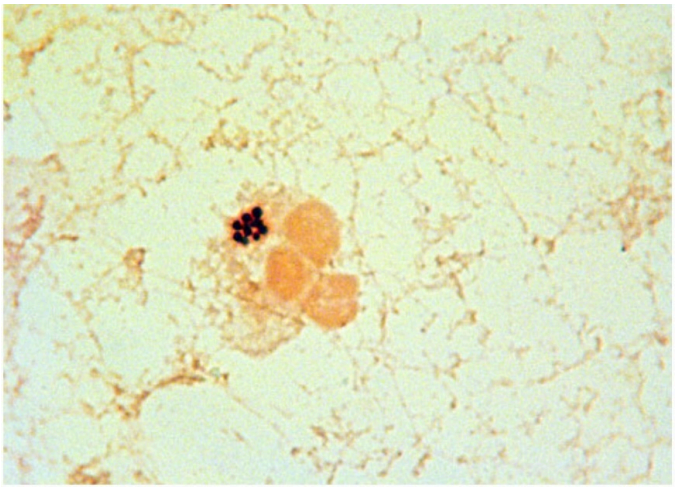
This is a forest plot of meta analysis. The summary result of combined data shows a confidence interval that crosses the null value (1), which means the observed difference is not statistically significant & maybe due to chance.

Cherry hemangioma: small, round, bright red, dome shaped papule. It is a clinical diagnosis & don't need diagnostic studies.

Westermark sign: oligemic lung field (on left) which occurs in pulmonary embolism. (not sure, NBME didn't interpret the CXR)

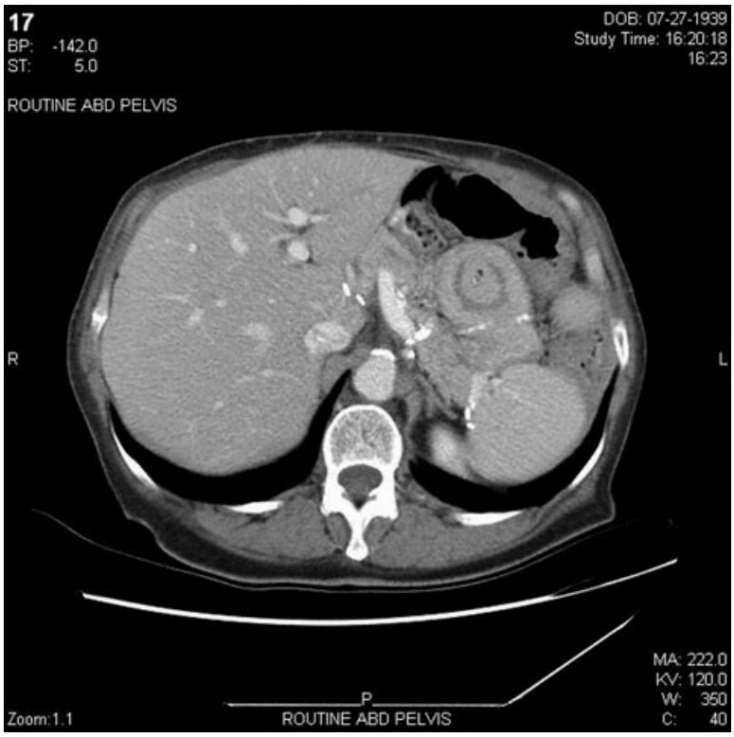


Branch retinal artery cholesterol emboli (Hollenhorst plaques) in amaurosis fugax.
Next step: carotid duplex US

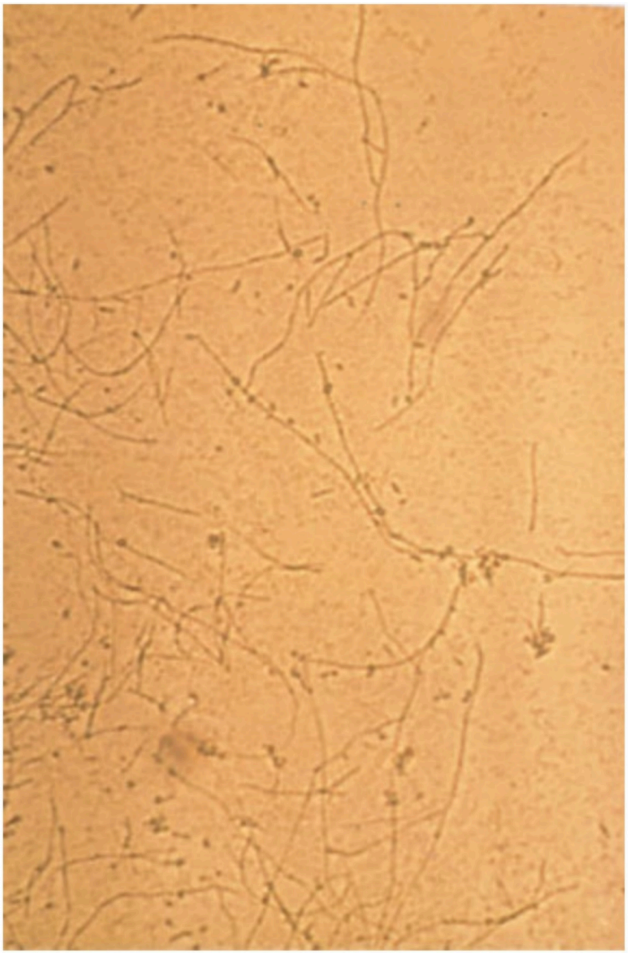


S. aureus: gram positive (purple) cocci in clusters. Rx of osteomyelitis should start with vancomycin until culture results are available.

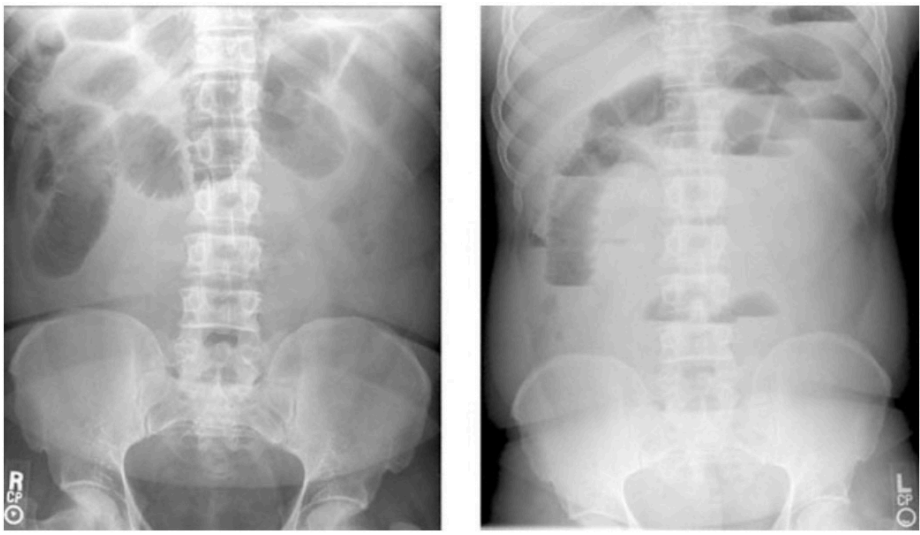
Erythema migrans of Lyme disease caused by borrelia burgdorferi.



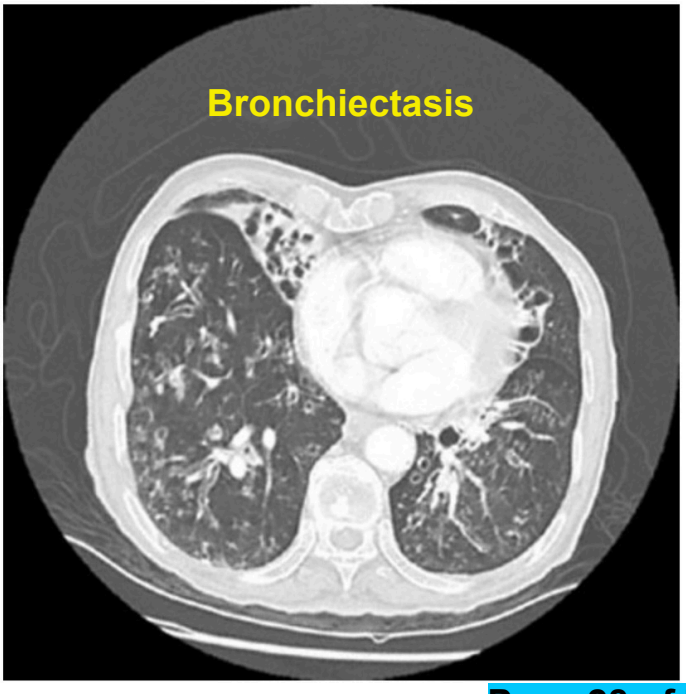
Target sign of intussusception



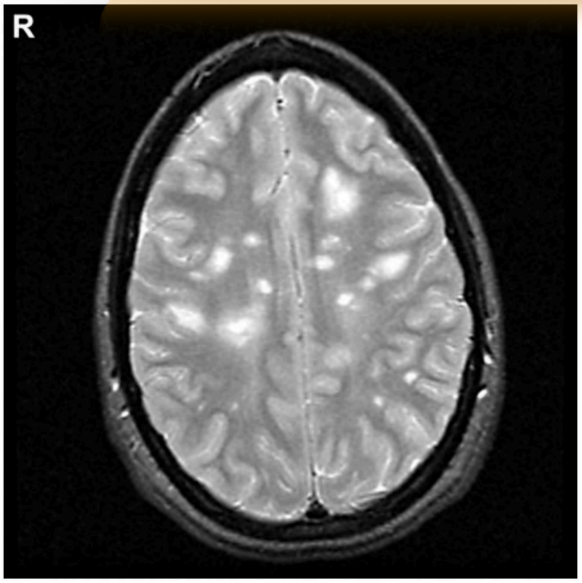
KOH preparation showing budding yeast & pseudohyphae (candidiasis). Severe oral thrush is treated by fluconazole.



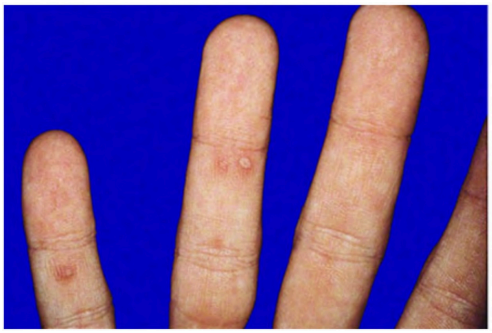
Small bowel obstruction (if it is due to inguinal hernia then it needs immediate groin surgical exploration).

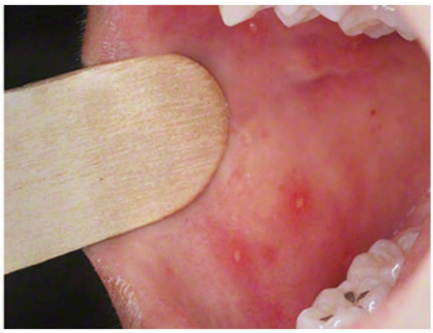


NBME 14



Multiple sclerosis plaques on MRI.
Rx: Steroids for acute flares.
Interferon-β, monoclonal antibodies or glatiramer to prevent relapse.



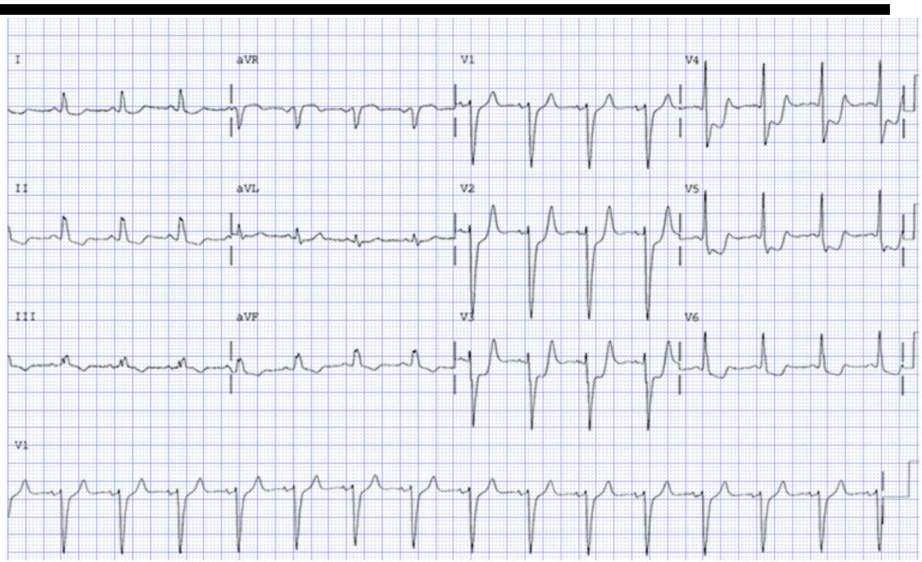


Hand-foot-and-mouth disease (Coxsackievirus A virus)
It is a clinical diagnosis (no need diagnostic studies).

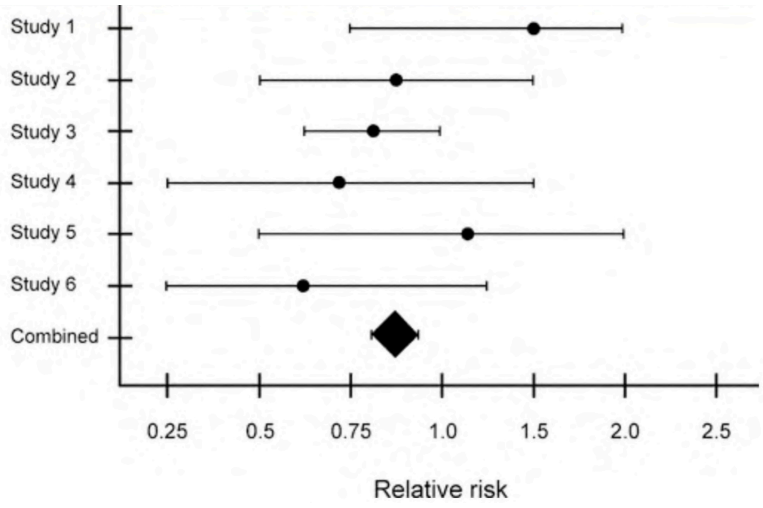
Osteoarthritis: Heberden (DIP) & Bouchard (PIP) node.

Tinea cruris, prevented by not sharing cloths, towels and so on.

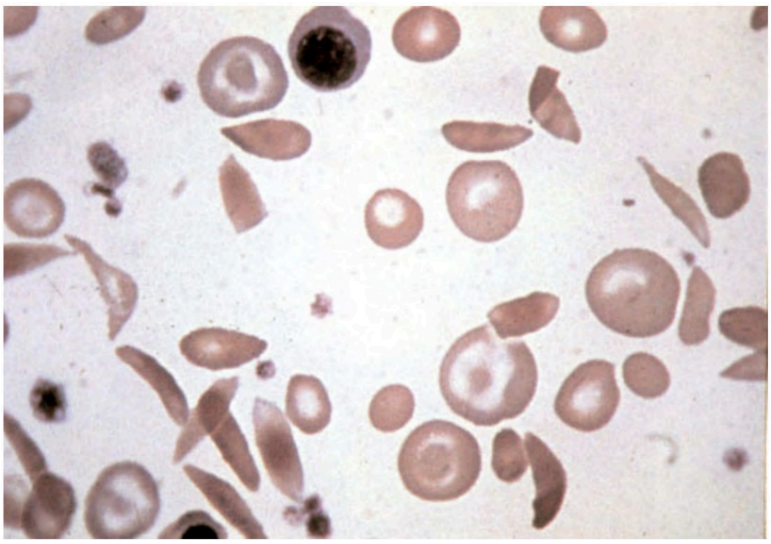
Lichen sclerosus: white plaques, thin, fibrosed skin, narrow introitus & loss of separation between both labia.



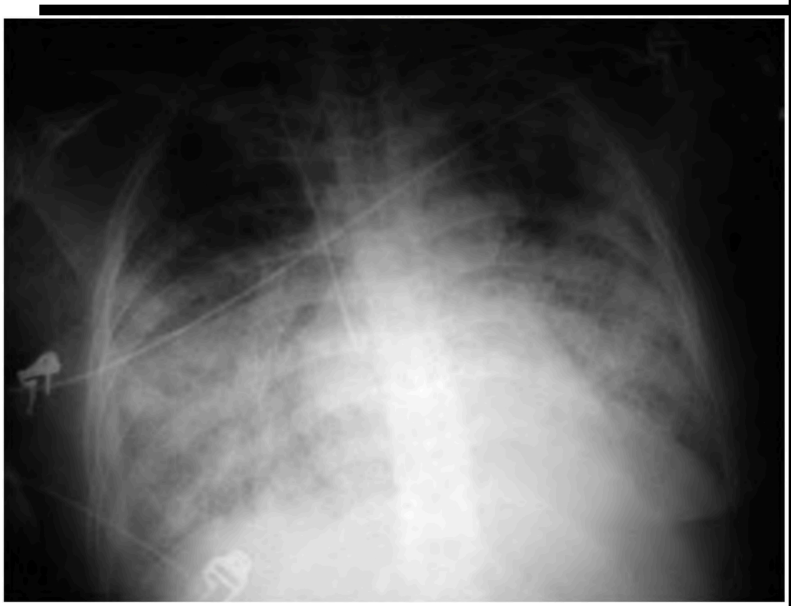
ST depressions can occur in NSTEMI.
Significant ST depression in the anterior leads could indicate posterior STEMI.



This is a forest plot of meta analysis, the combined result indicates a decreased risk (less than 1) that is statistically significant (confidence interval doesn't cross 1)



Sickle cells & target cells in sickle cell disease. Hb electrophoresis will show absent HbA, high HbS, high HbF.

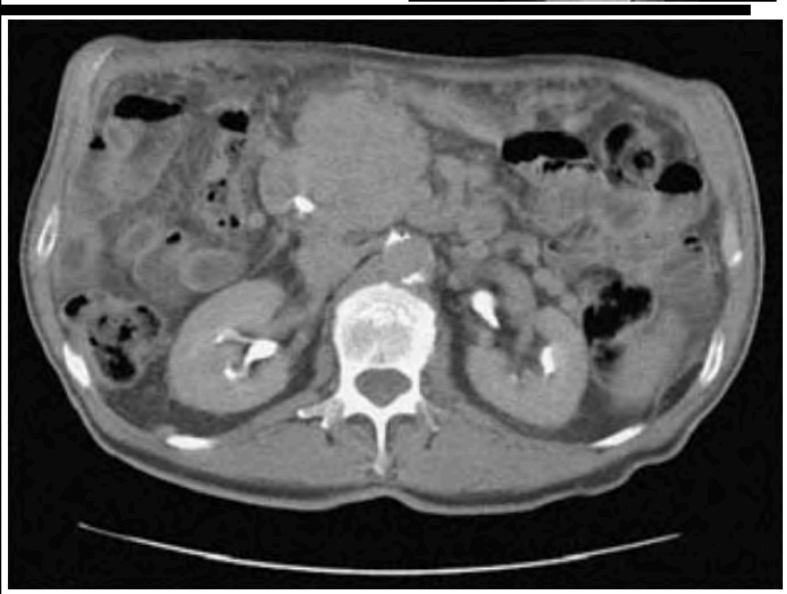


TRALI: bilateral pulmonary infiltrates

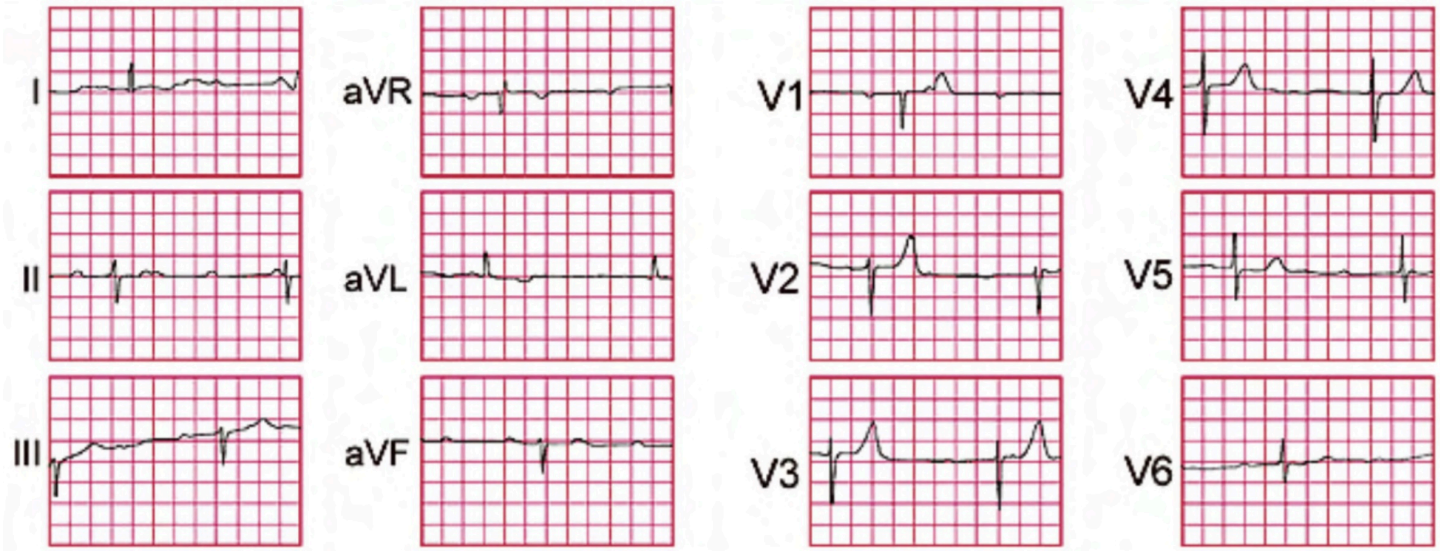
Osteosarcoma
Xray: Periosteal reaction, irregular, ragged borders & areas of disorganized osteogenesis.

Next step: MRI then bone biopsy.

Renal osteodystrophy: decreased bone mineralization and cortical irregularity of the posterior calcaneus.
Labs: hypocalcemia & hyperphosphatemia that lead to secondary hyperparathyroidism.

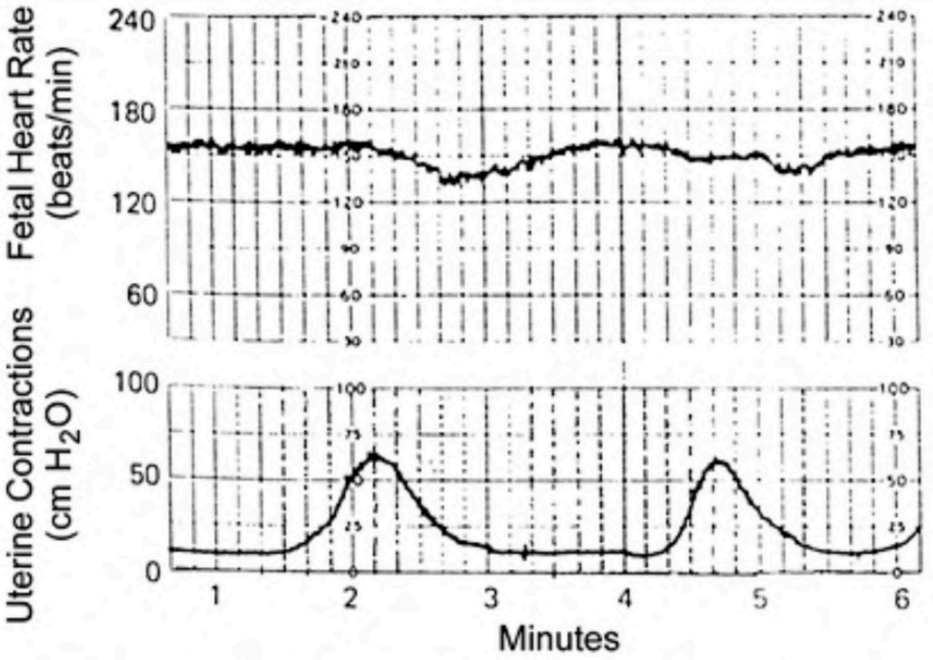


CT of pancreatic cancer.
If pain is resistant to high dose opioid, then celiac plexus blockade can be done.

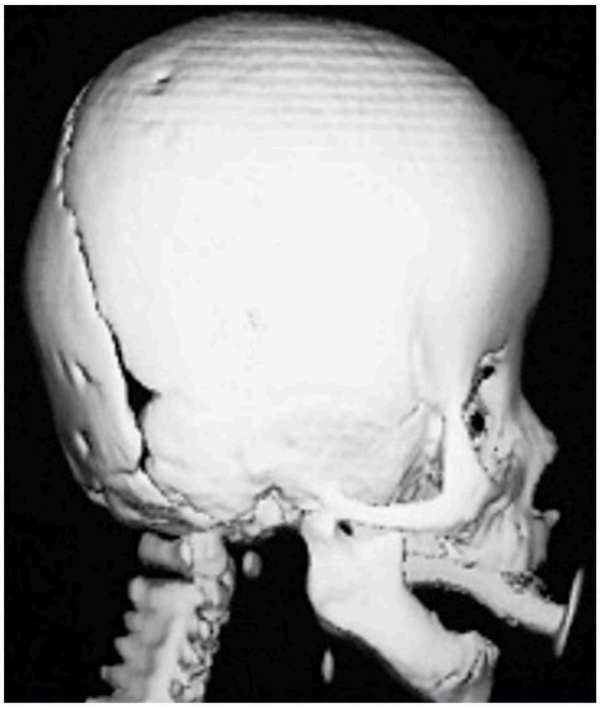


Third degree AV block: Treat by insertion of cardiac pacemaker.

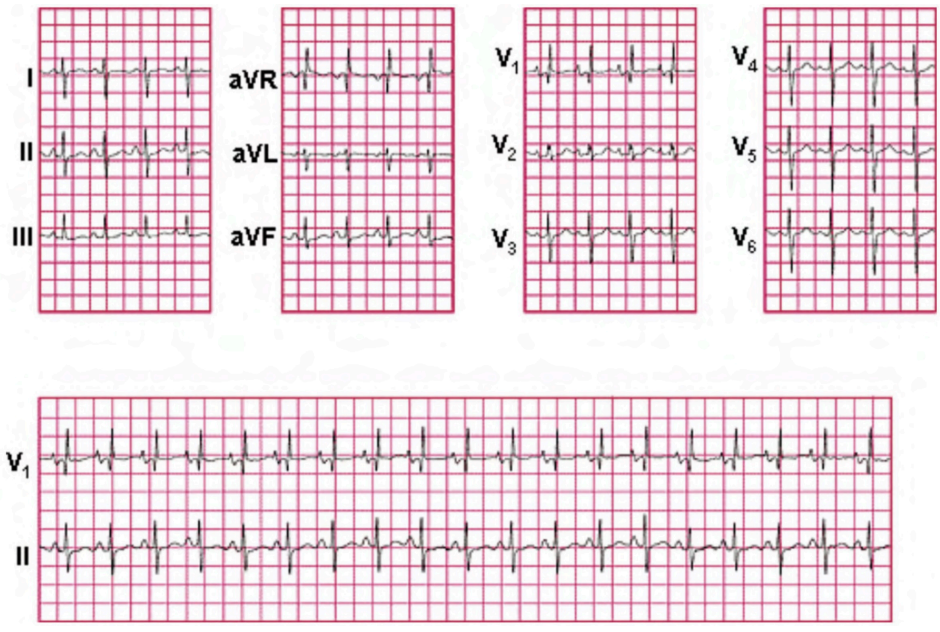
Boot-shaped heart → ToF which consists of PS (RVOTO), RVH, VSD & Overriding aorta.



Late decelerations.
Rx: oxygen, left maternal position or onto all fours and IV fluids. If persists then perform cesarean section

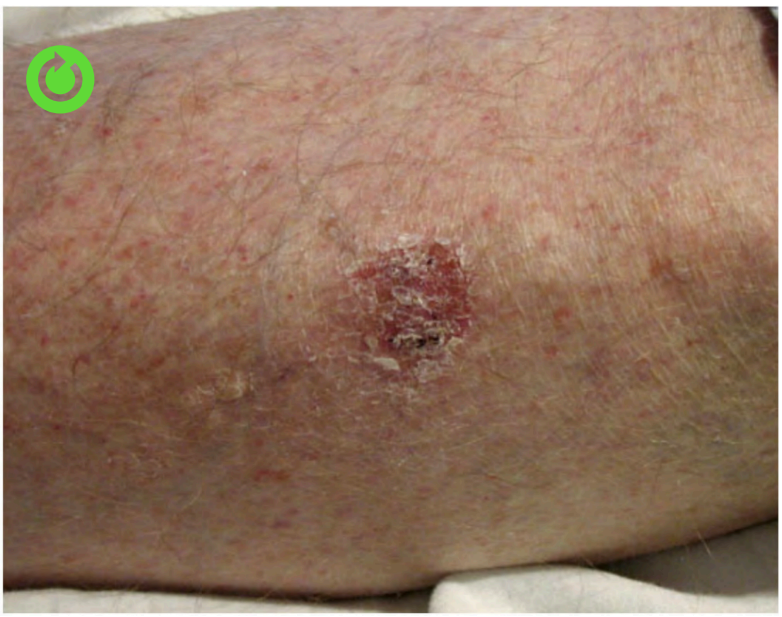


CT of coronal craniosynostosis



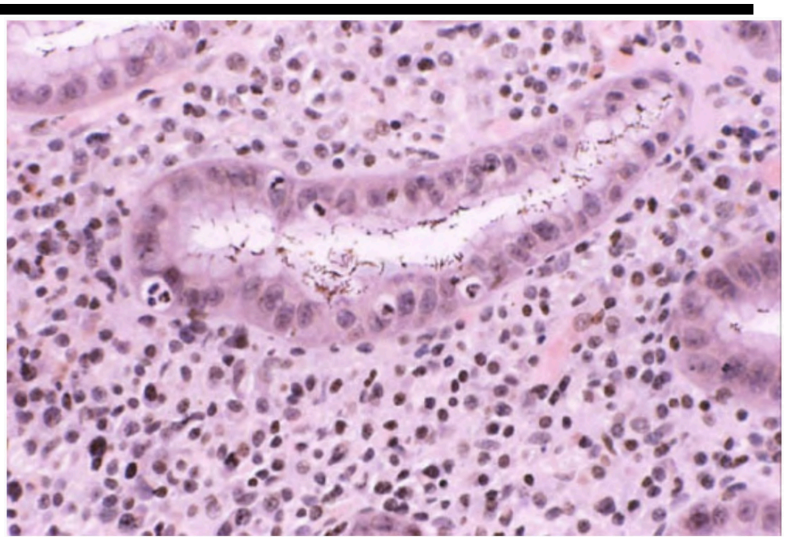
Multifocal atrial tachycardia, due to cor pulmonale

MRI: meniscus tear and joint effusion.
Rx: conservative if mild, operative if there are severe symptoms and joint locking.

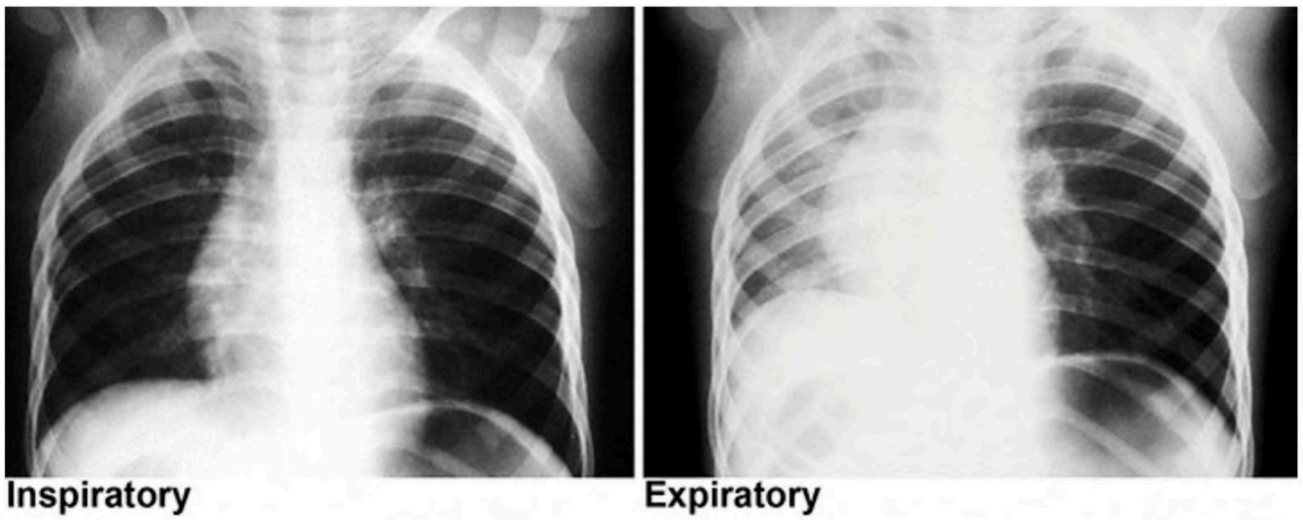


squamous cell carcinoma: rough plaque or nodule with focal erosion or ulceration and overlying hyperkeratotic scale.

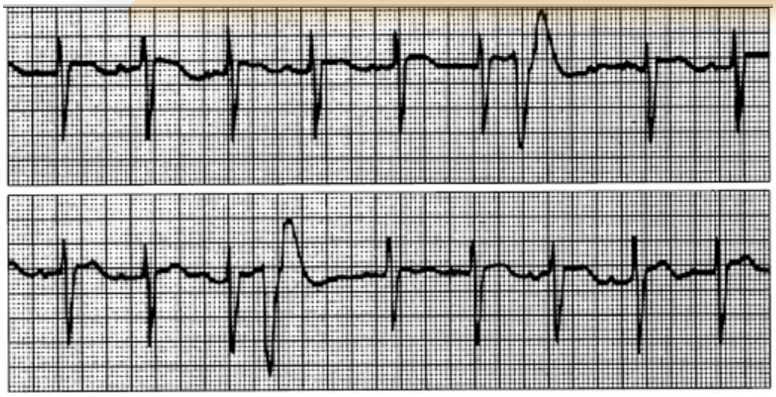
Normal ankle x-rays, patient had bilateral ankle symptoms of rheumatoid arthritis



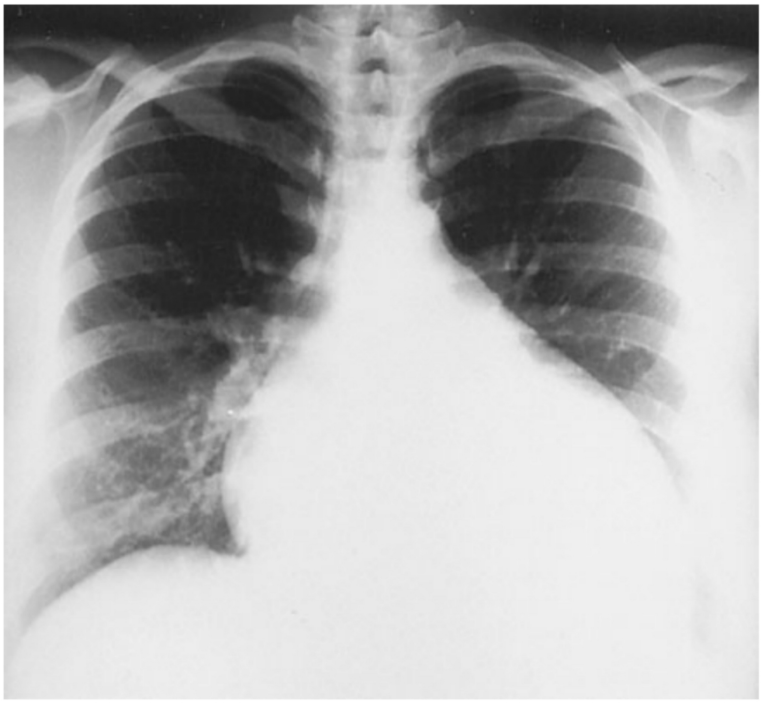
H. pylori (short, spiral-shaped bacteria) on stomach ulcer biopsy.
Rx: triple therapy (PPI, clarithromycin and amoxicillin)



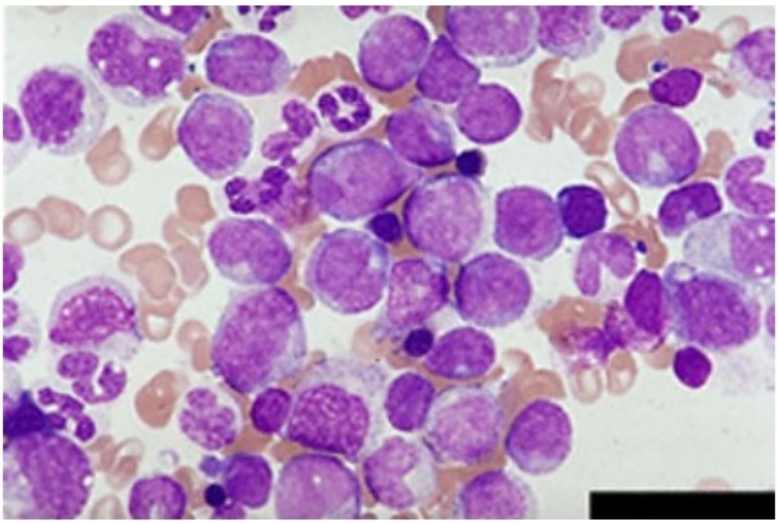
Foreign body aspiration (of left lung): hyperinflation more on expiration



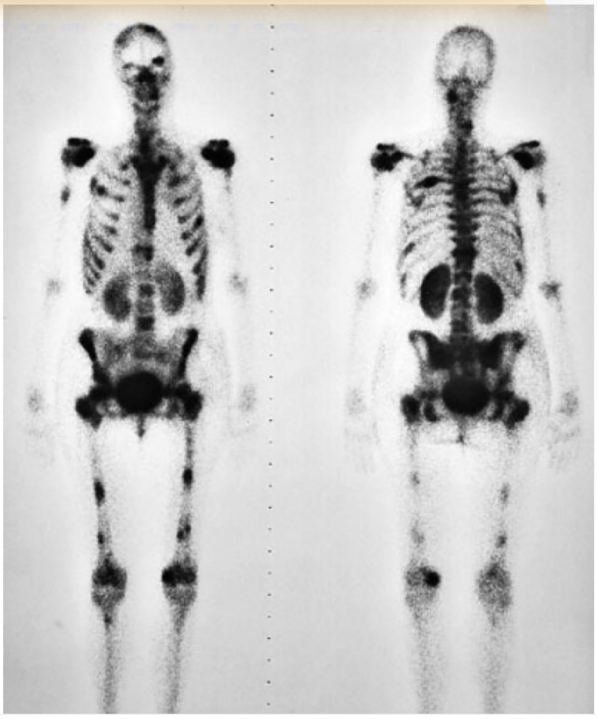
Premature ventricular contractions (PVCs)



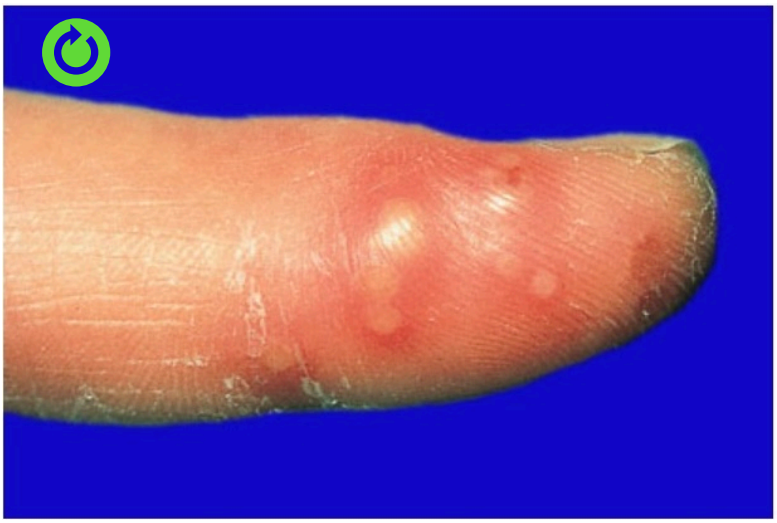
Cardiomegaly can be due to cardiomyopathy



Blood smear of chronic myelogenous leukemia (CML)



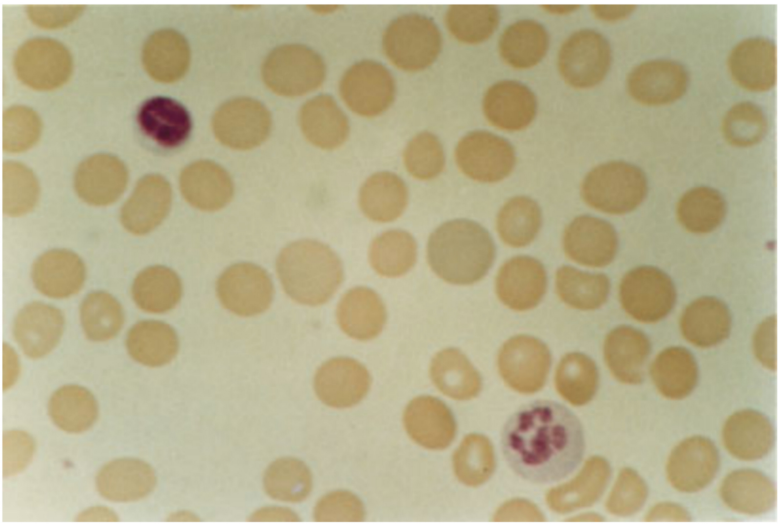
Bone scan: Bone metastasis



Herpetic whitlow
Rx: oral acyclovir

Shingles, caused by varicella zoster virus.

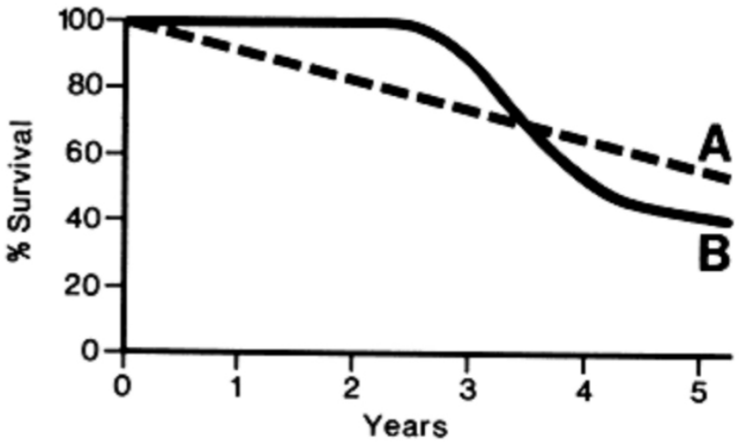
Osteonecrosis of femoral head



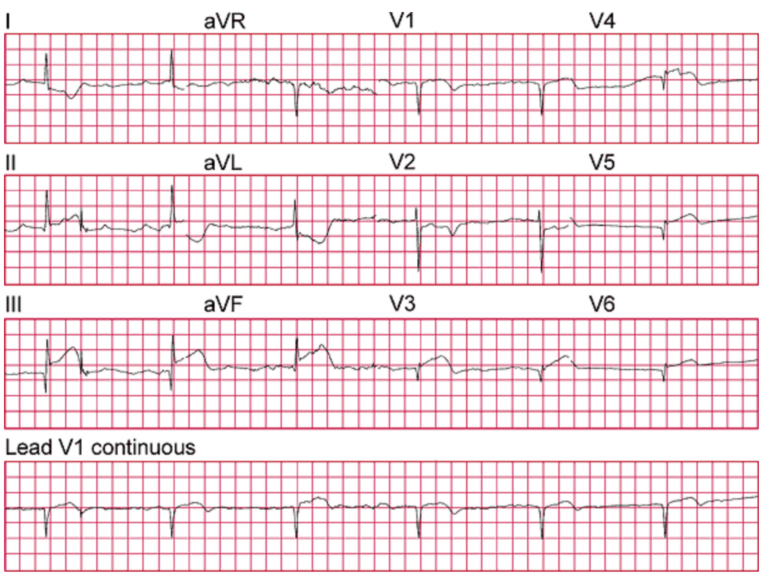
Macrocytosis, Hypersegmented neutrophils
Indicates megaloblastic anemia due to impaired DNA synthesis

ABCDE of Malignant Melanoma
Next step: surgical excision.

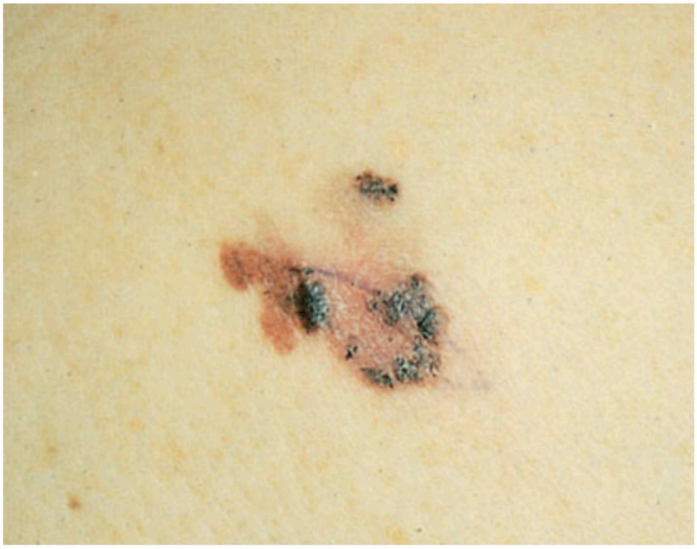
Pancreatic pseudocyst (need endoscopic drainage if size > 5cm or symptomatic).



Poorest survival year is group B at year 3-4



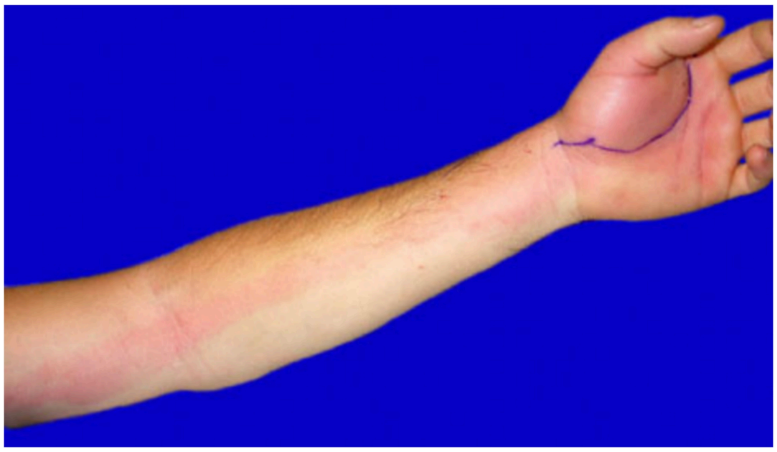
Inferior STEMI (II, III, aVF) with complete heart block and an escape rhythm (focus located in common (His) bundle



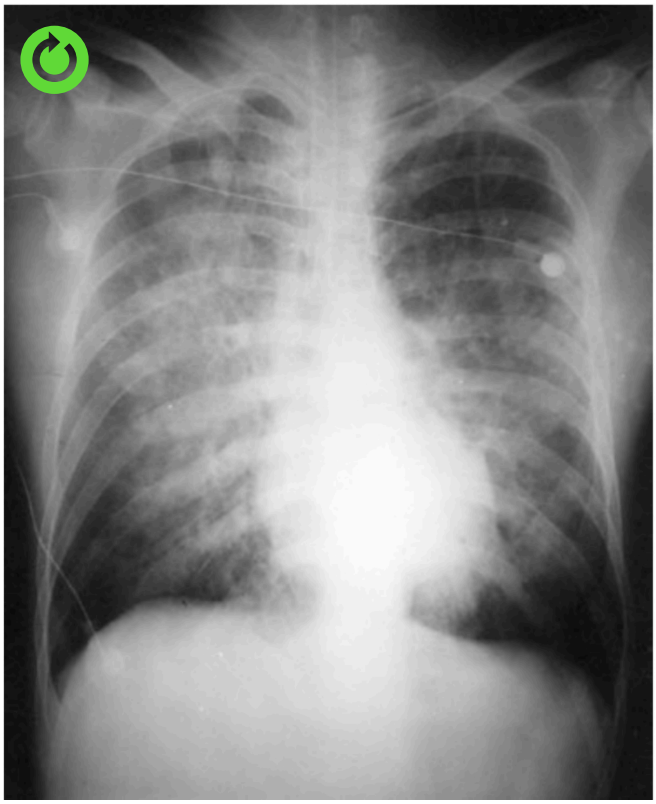
ABCDE of Malignant Melanoma
Next step: surgical excision.

Tuberculosis

Painless chancre of primary syphilis on glans.
Rx: penicillin. (RPR maybe negative)



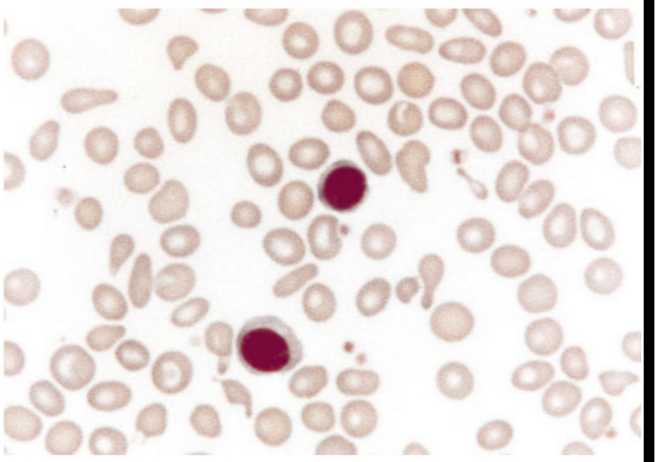
Lymphangitis



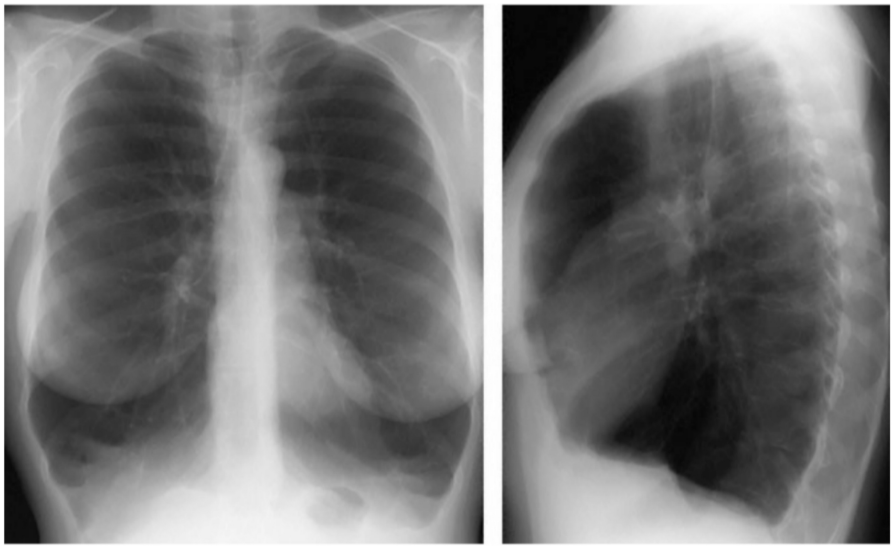
ARDS: diffuse reticular & airspace opacities

ABCDE of Malignant Melanoma
Dx: full thickness biopsy (rather than shave biopsy).

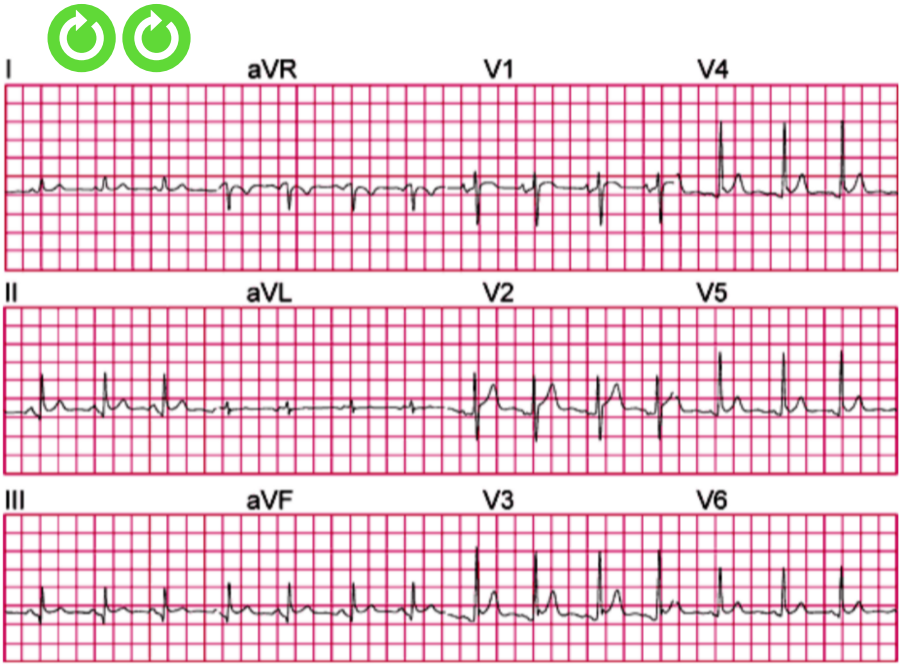
Temporal lobe hyperattenuation → HSV encephalitis. Rx: acyclovir.



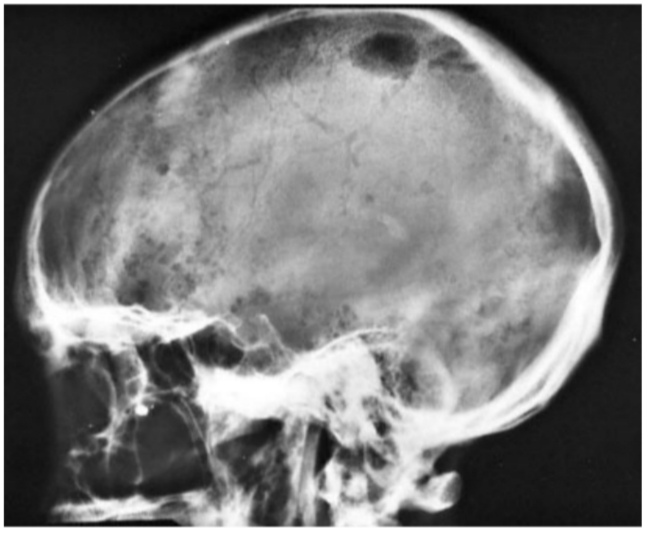
Hypochromic RBC of iron deficiency



Emphysema

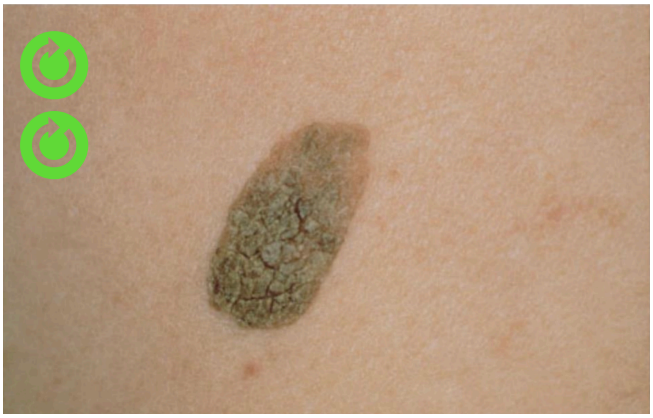


Pericarditis: diffuse concave ST elevation. Rx: NSAID (as ibuprofen) + colchicine



Lytic skull lesions of multiple myeloma → test serum protein electrophoresis

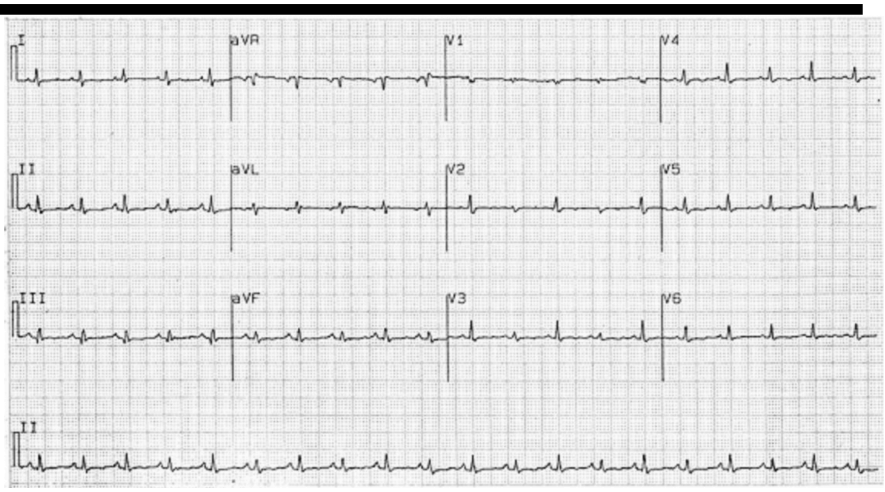
MRI: avascular necrosis of left femoral head



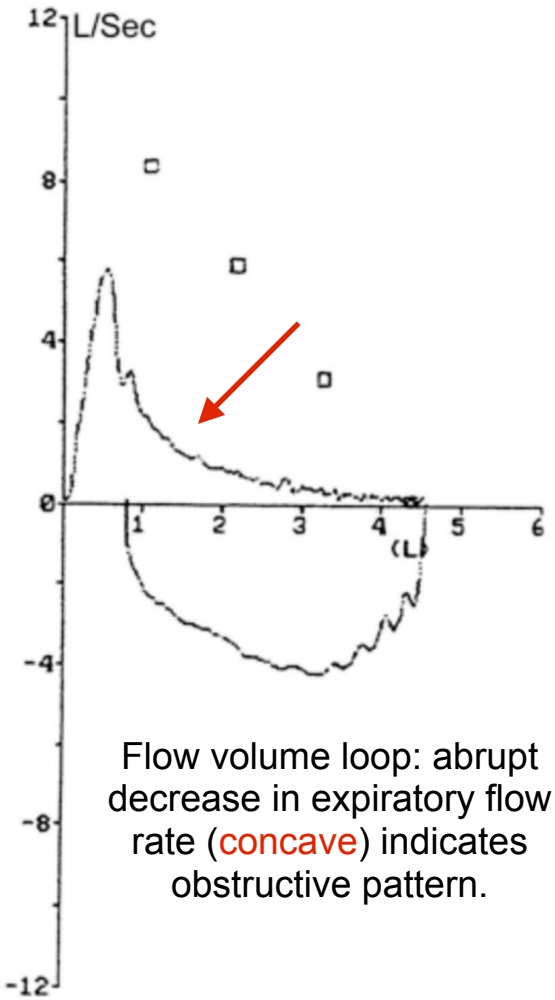
Seborrheic keratosis (stuck-on lesion)
Age is most important risk factor.

Podagra + needle shaped birefringet crystal of gout
Rx: NSAID, Colchicine ± corticosteroids.

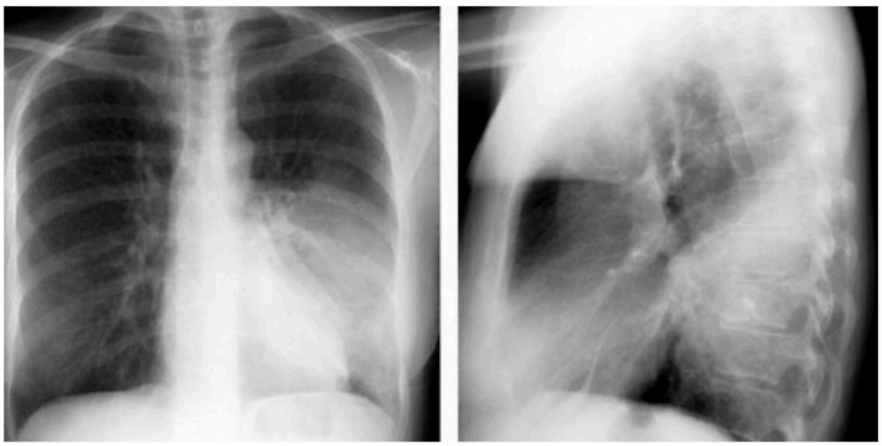
Actinic keratosis. If resistant to therapy → excisional biopsy to exclude SCC.



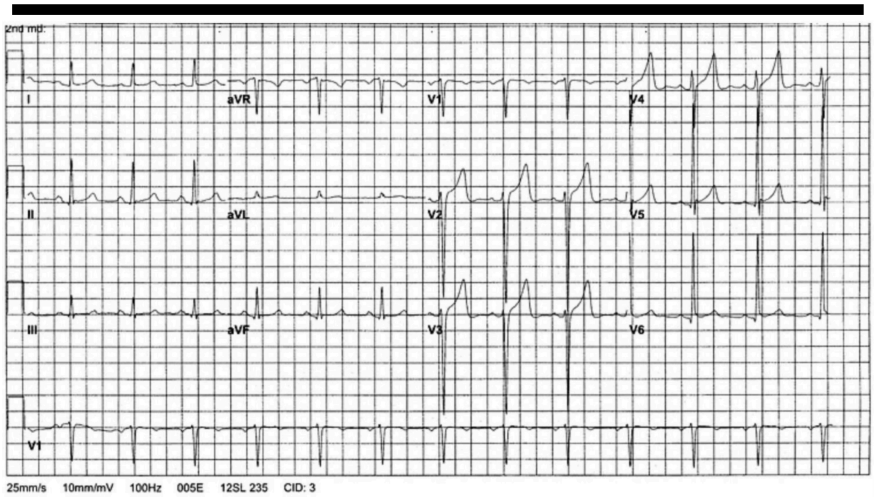
ECG of pericardial effusion: Low voltage and electerical alternans



Flow volume loop: abrupt decrease in expiratory flow rate (concave) indicates obstructive pattern.



Consolidation on left. If hospital acquired then the initial antibiotics are broad-specturm (vancomycin+ceftazidime).

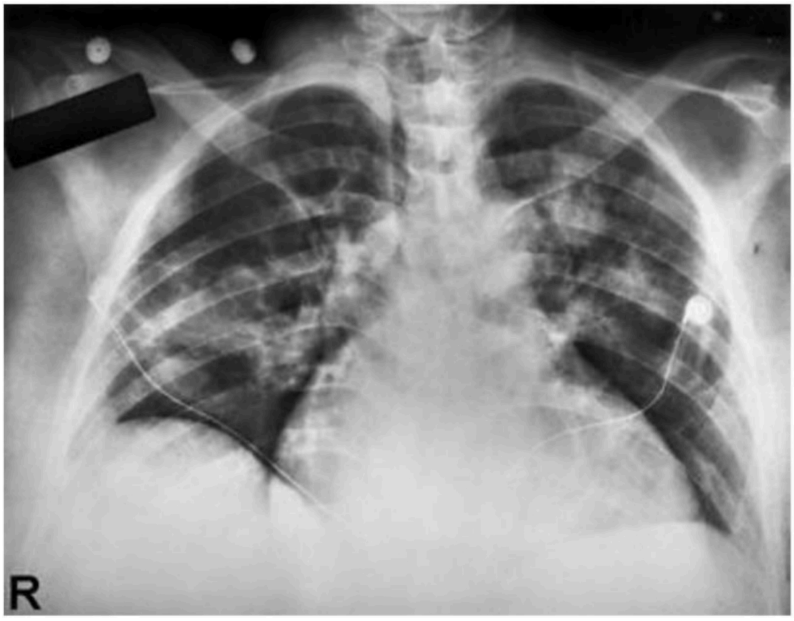


ECG of LVH → leads to diastolic dysfunciton

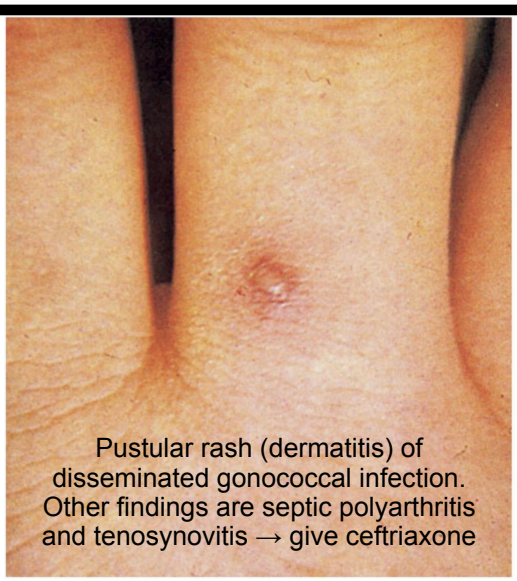
Normal x-ray in rotator cuff tendonitis

Silicosis: bilateral apical fibrosis

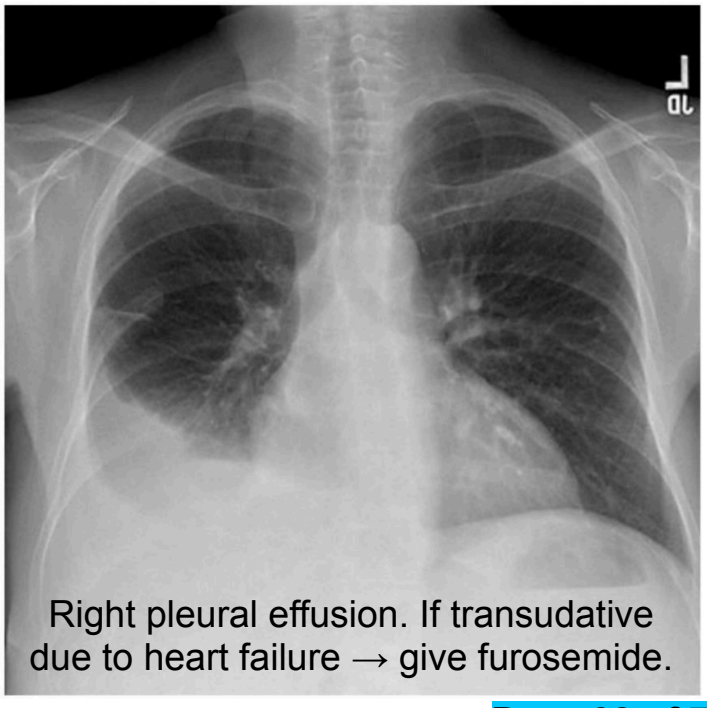
Psoriasis (salmon colored plaque with silvery scale)



Septic emboli from infective endocarditis
Dx by blood cultures before echo

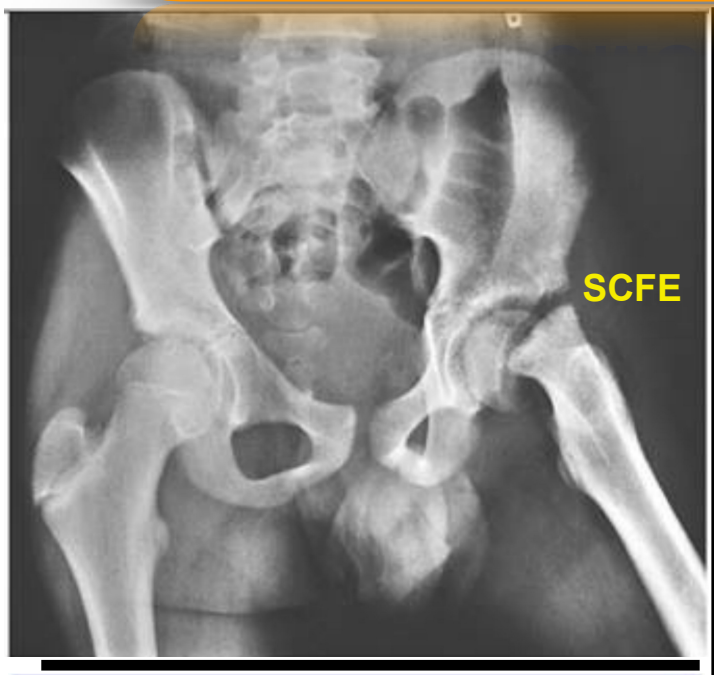


Pustular rash (dermatitis) of disseminated gonococcal infection. Other findings are septic polyarthritis and tenosynovitis → give ceftriaxone

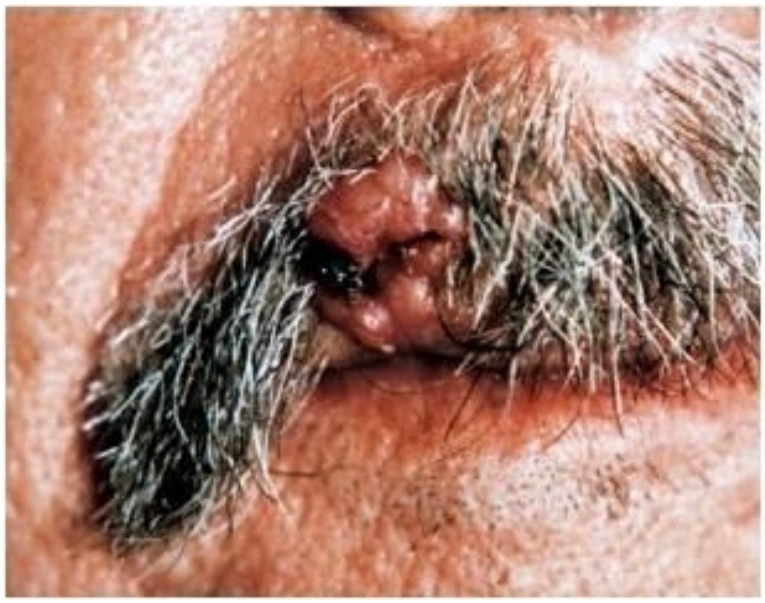


Right pleural effusion. If transudative due to heart failure → give furosemide.

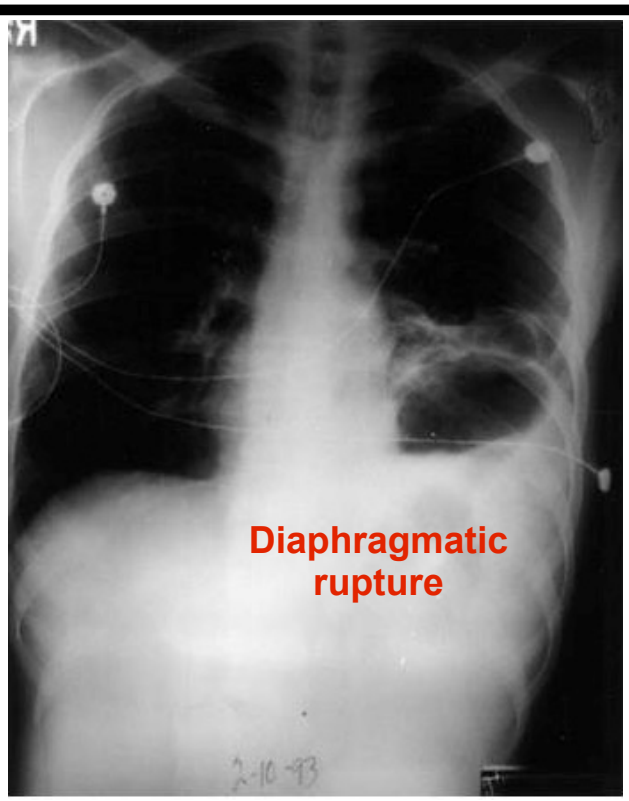
CMS - Surgery

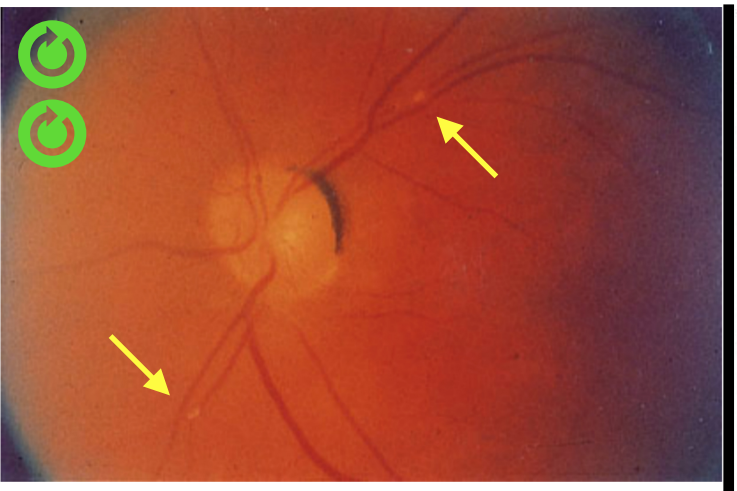


Avascular necrosis of right femoral head

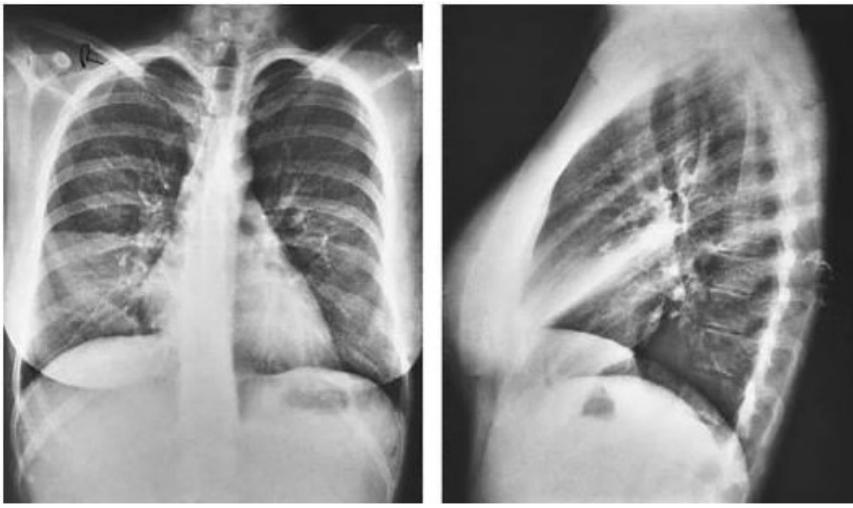


BCC: pearly lesion, telangiectasia, upper lip



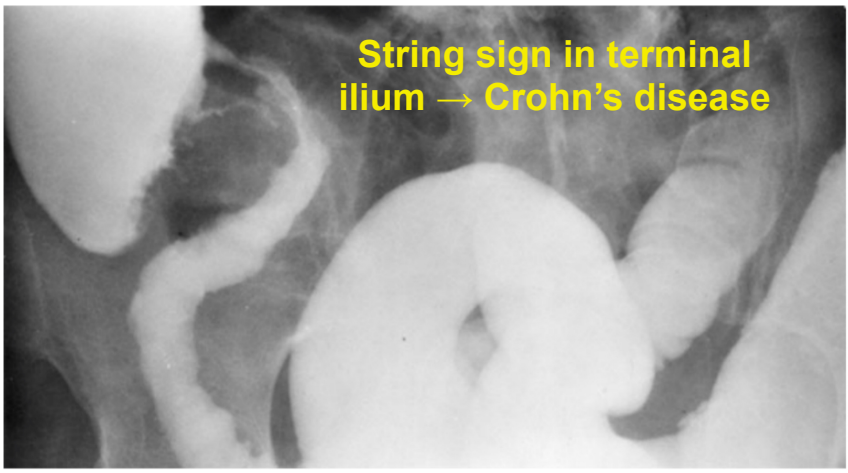


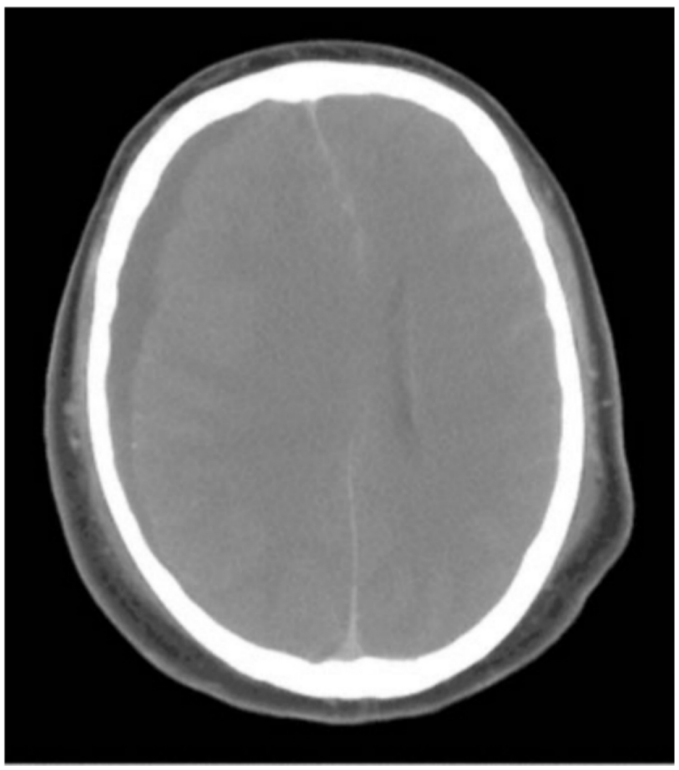
Branch retinal artery cholesterol emboli (Hollenhorst plaques) in amaurosis fugax.



Collapse of right middle lobe

Bilateral hilar LAP in sarcoidosis





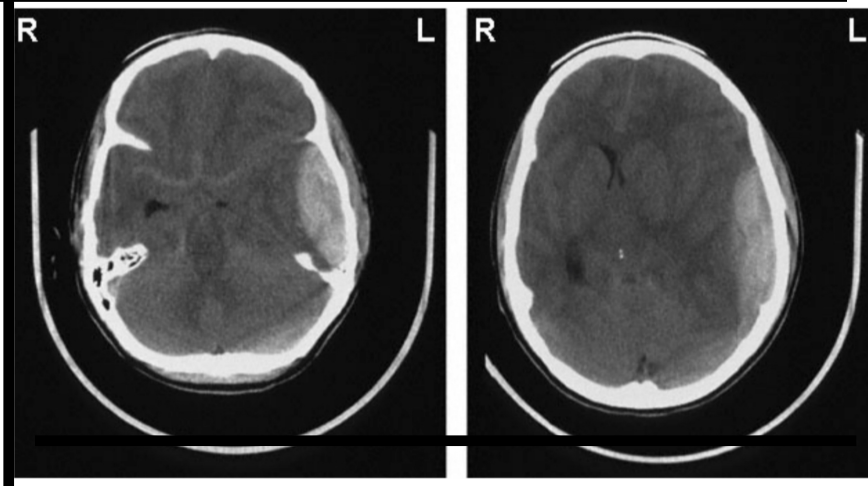
Right subdural hematoma (SDH)

Coffee-bean sign → sigmoid volvulus.
Rx: Sigmoidoscopic placement of a rectal tube.

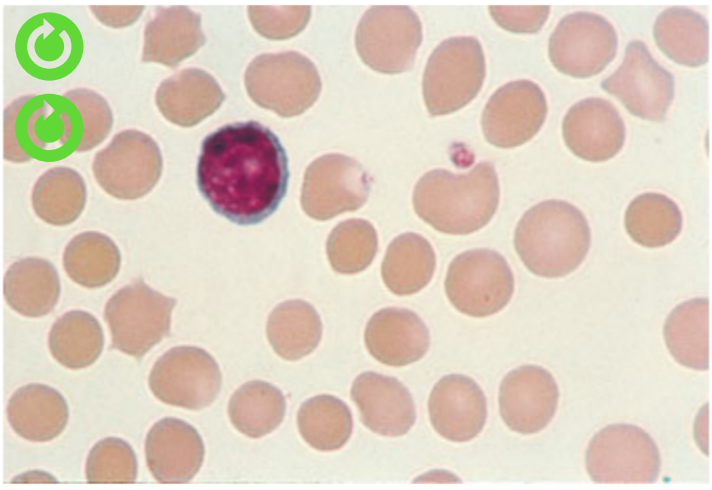
AV fistula at femoral vessels.
Size of it determines risk for heart failure

Perianal mass needs biopsy to exclude cancer

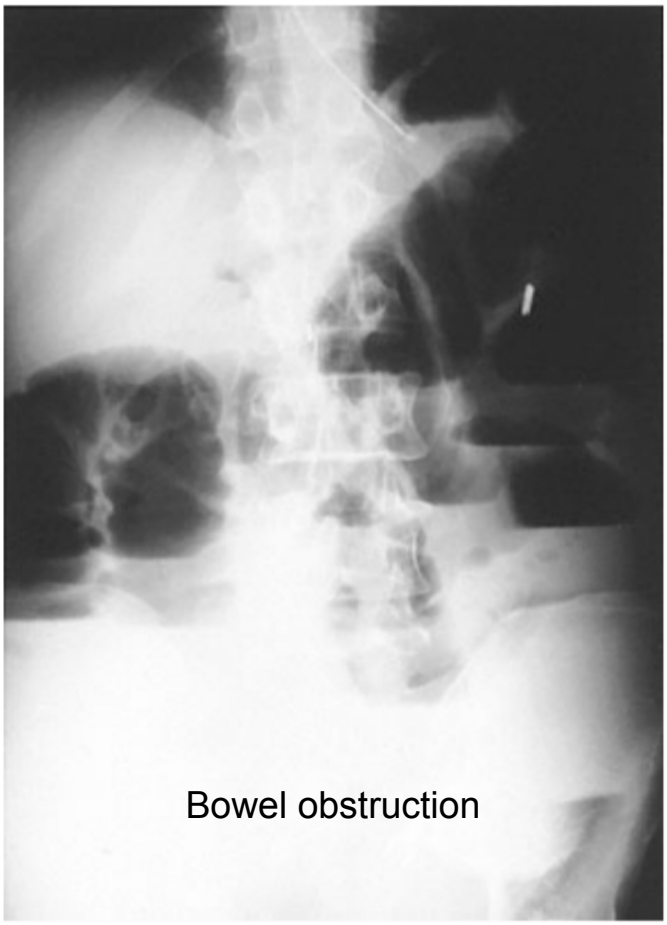
Basal cell carcinoma



Epidural hematoma



Hereditary spherocytosis
Rx: splenectomy



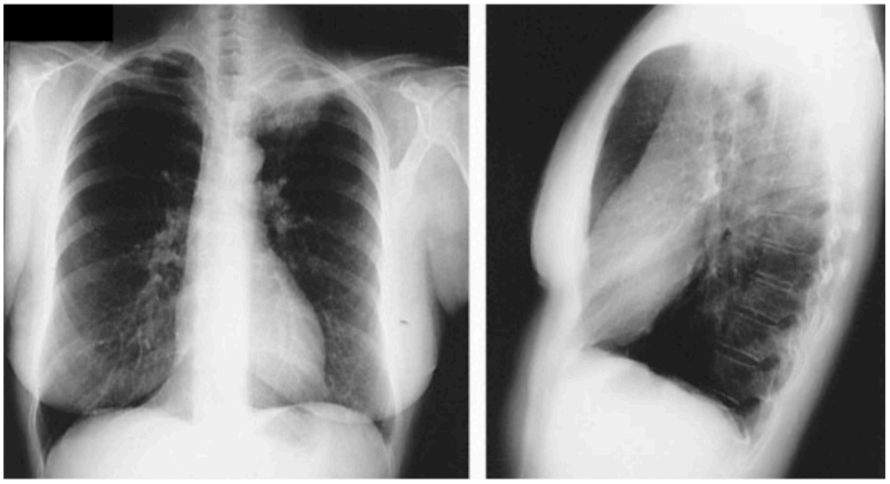
Bowel obstruction

Coffee-bean sign → sigmoid volvulus

Pharyngoesophageal (Zenker) diverticulum due to cricopharyngeal muscle spasms

Cavernous hemangioma

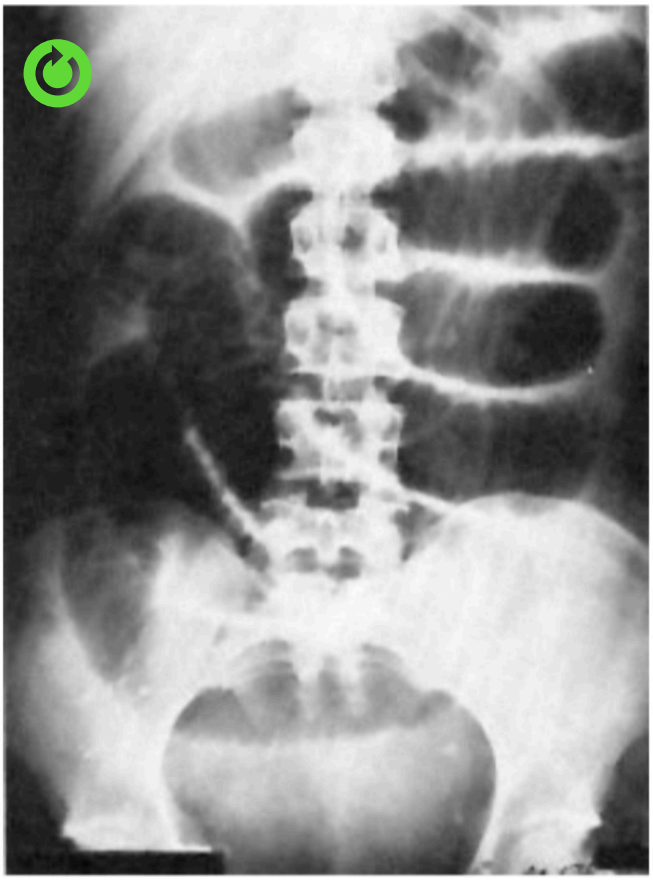
Aortic atheroembolism (cholesterol embolization syndrome)



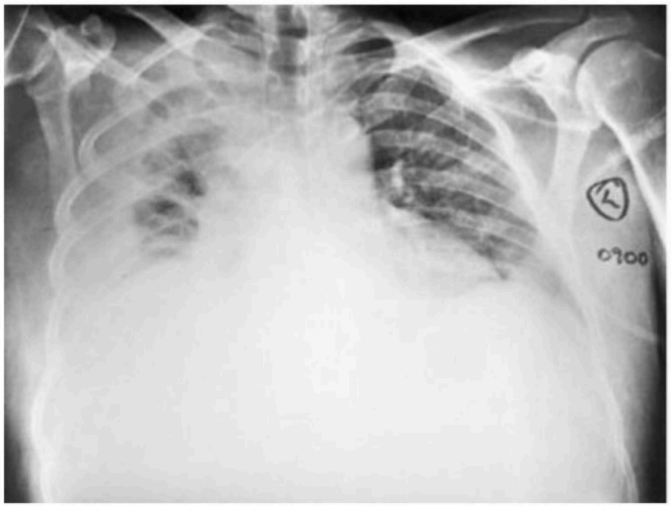
Pancoast tumor of left lung apex (can present with horner syndrome)

Calcaneal (heel) spur, associated with planter fasciitis

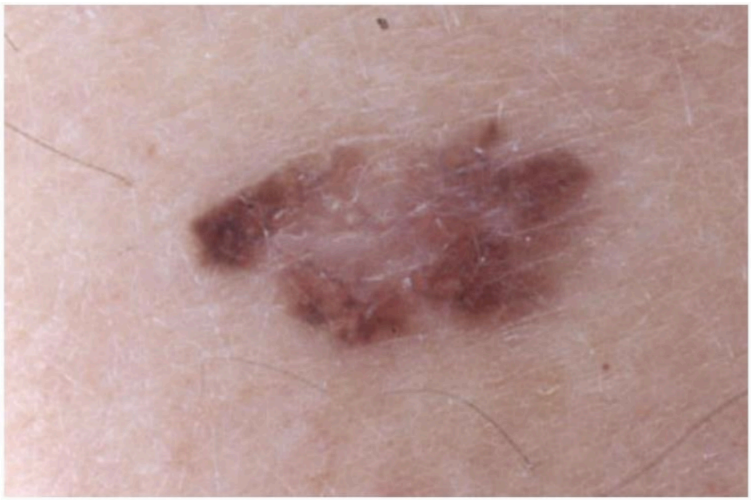
Necrotizing fasciitis
Rx: urgent debridement & IV antibiotics



Bowel obstruction

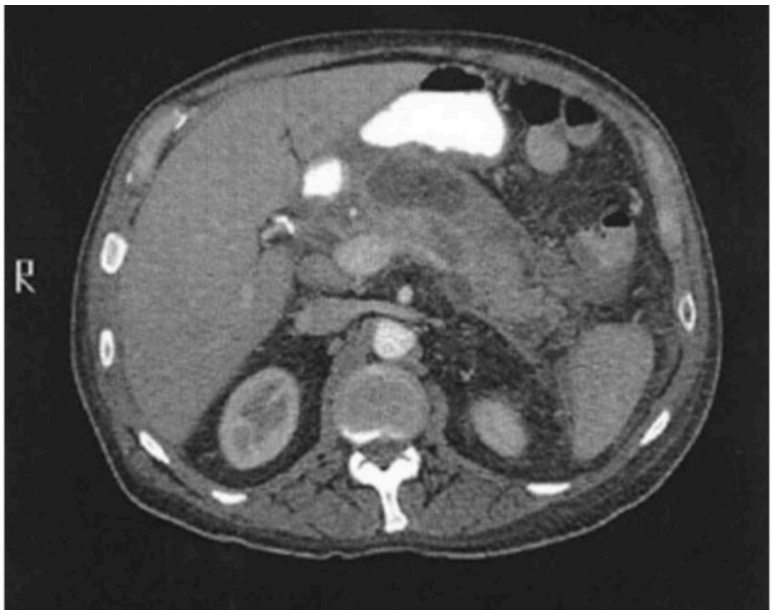


CXR: reduced lung volumes, large region of consolidation and effusion in the right lung.
CT of same case: loculated, heterogeneous fluid collection = empyema.

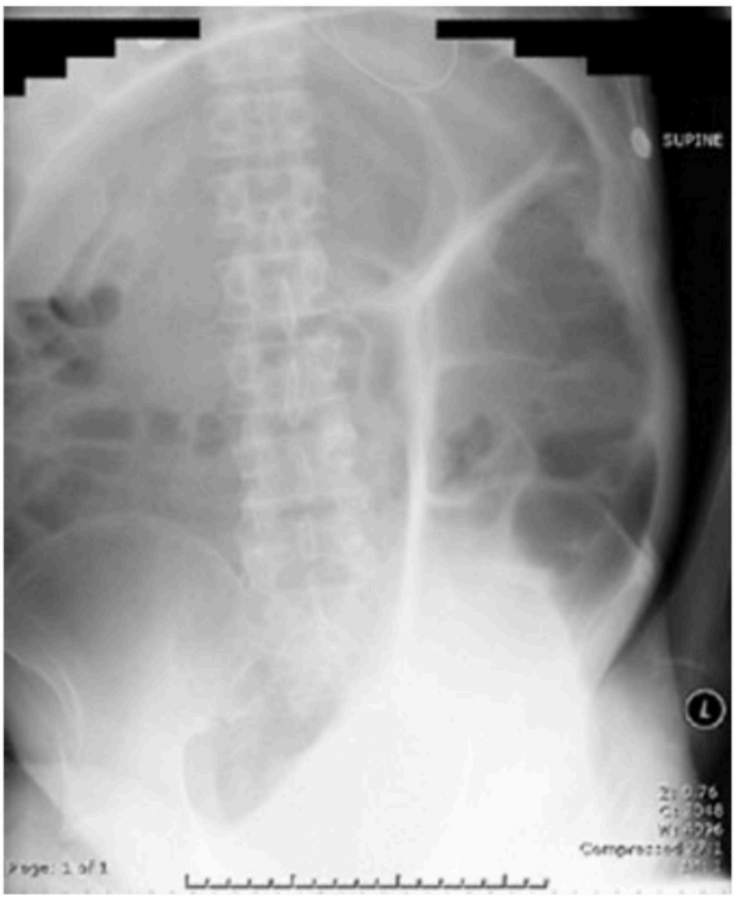


ABCDE of Malignant Melanoma

Zenker diverticulum on barium swallow.
Rx: diverticulectomy



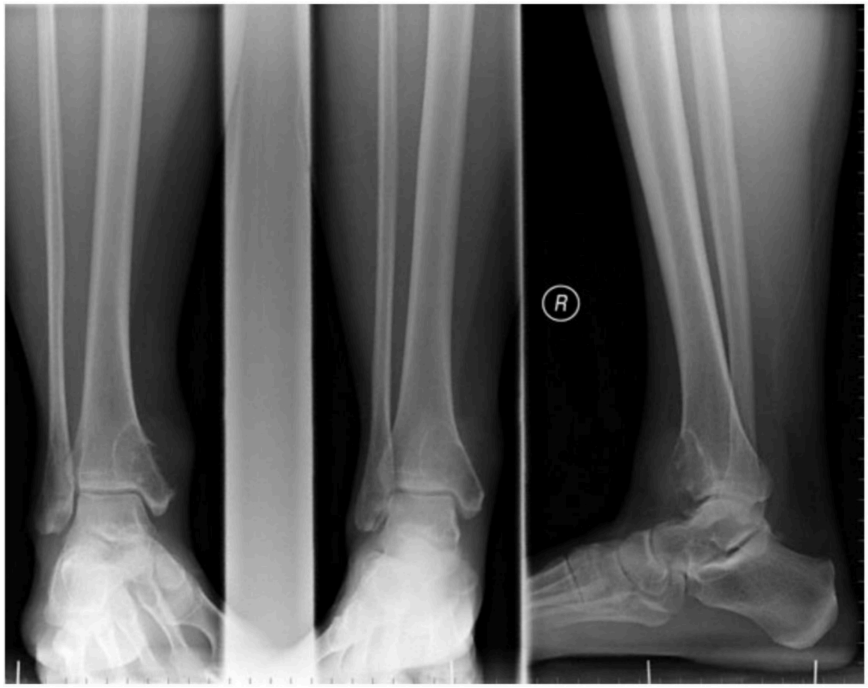
CT of acute pancreatitis



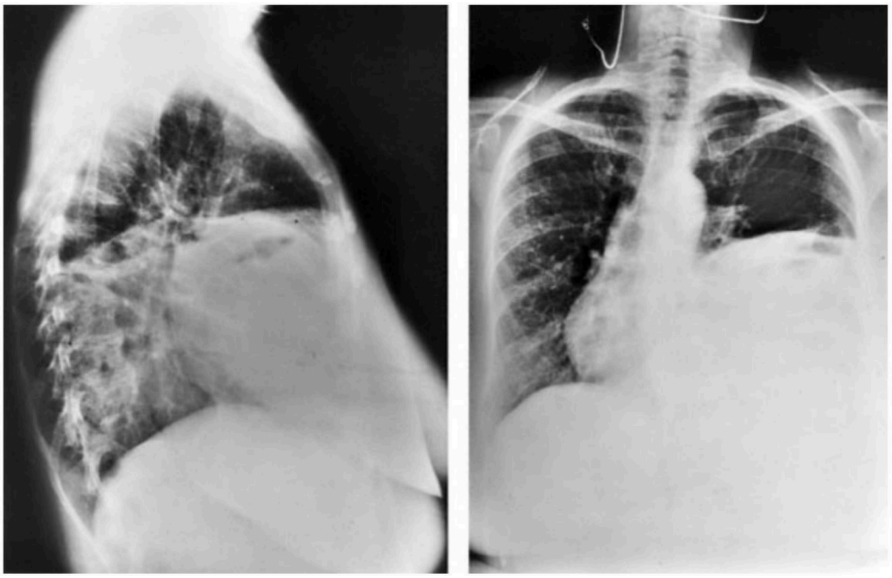
Coffee-bean sign → sigmoid volvulus

Pneumatosis intestinalis → necrotizing enterocolitis

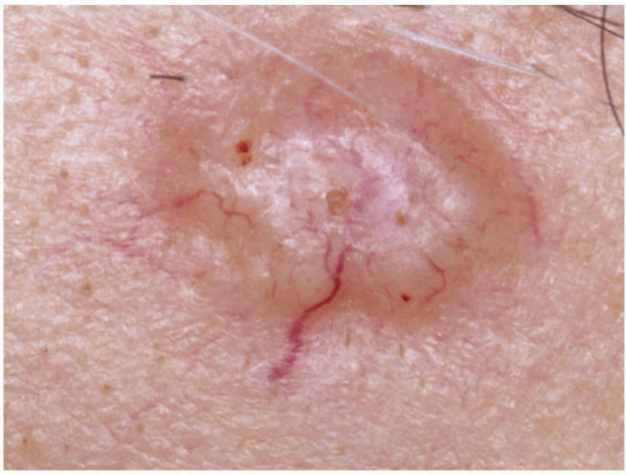
Free fluid around liver & spleen with lacerated spleen.
Unstable patients need exploratory laparotomy.



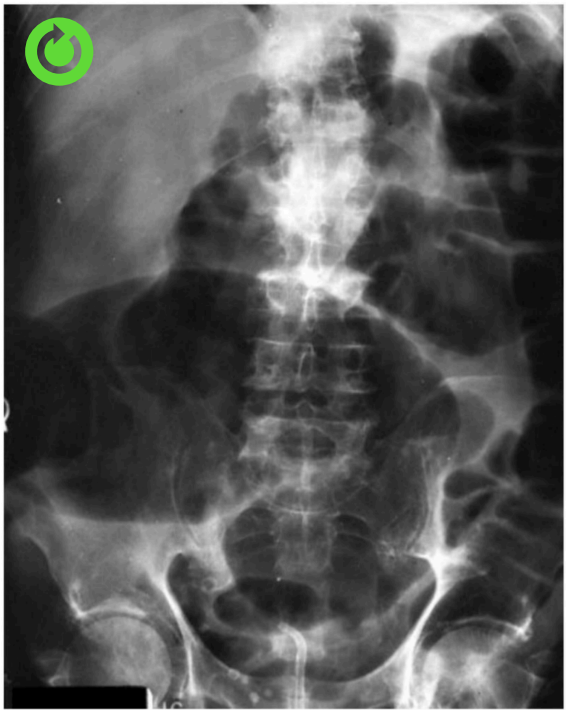
Medullary & cortical bone destruction of anterior, distal, medial tibia and malleolus with periosteal reaction likely indicating malignancy which needs biopsy to confirm.



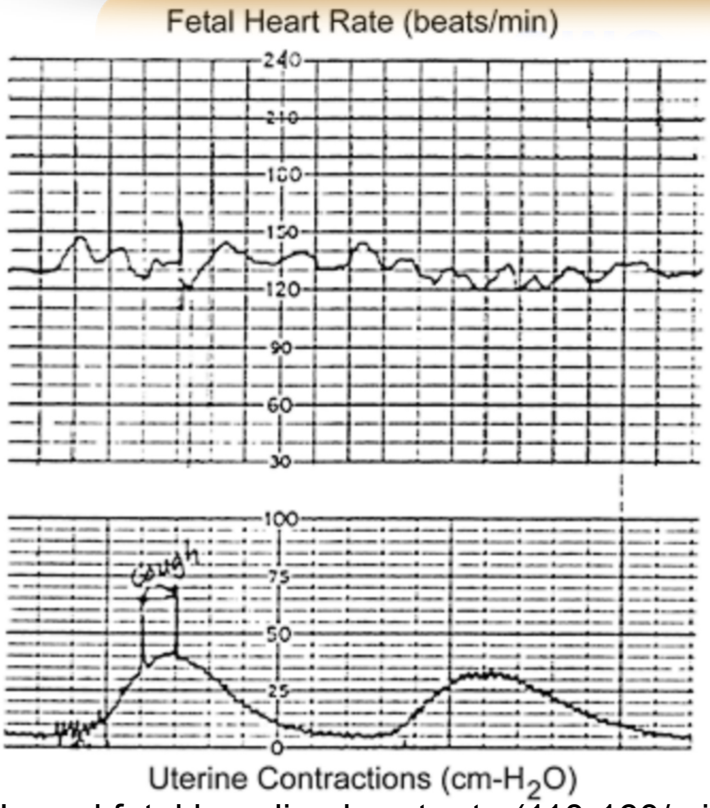
Gastric bubble on left hemithorax which indicates diaphragmatic rupture



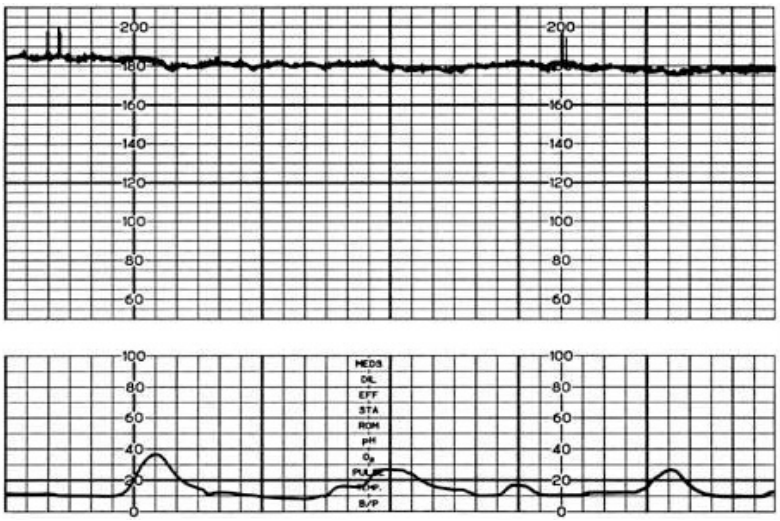
BCC (both): pink pearly papule/nodule with rolled borders, central ulceration and telangiectasia.
Rx: excision with 0.5-1 cm margins or Mohs micrographic surgery.



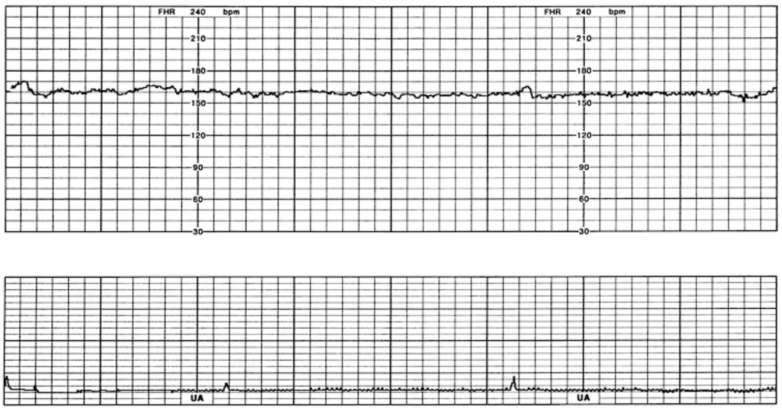
Sigmoid volvulus
*this image in NBME13 is toxic megacolon



Normal fetal baseline heart rate (110-160/min).
Normal variability (6-25/min).

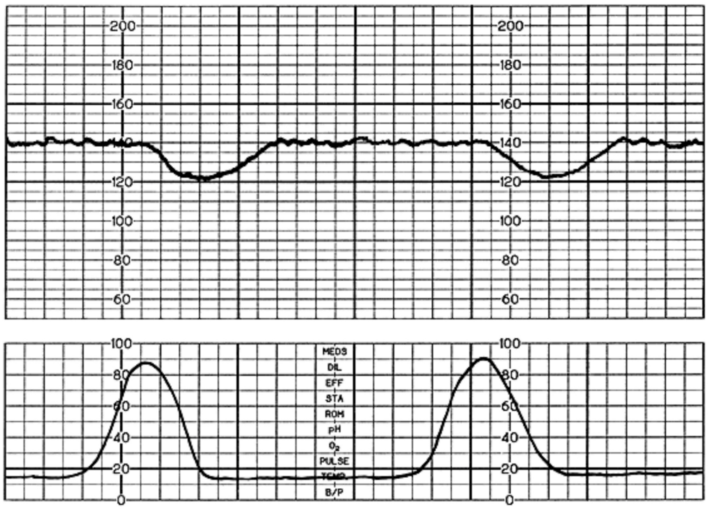


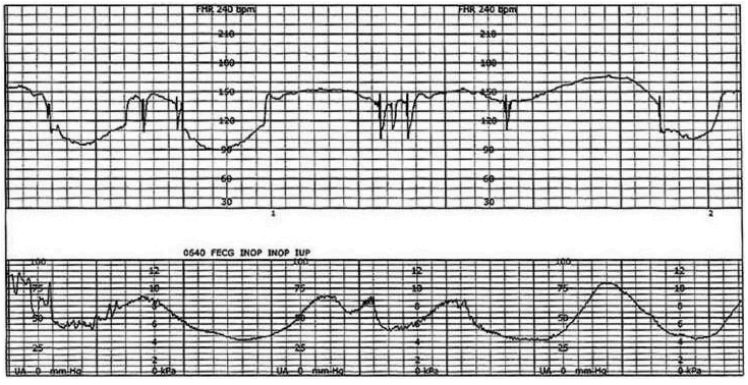
Fetal tachycardia maybe due to maternal fever



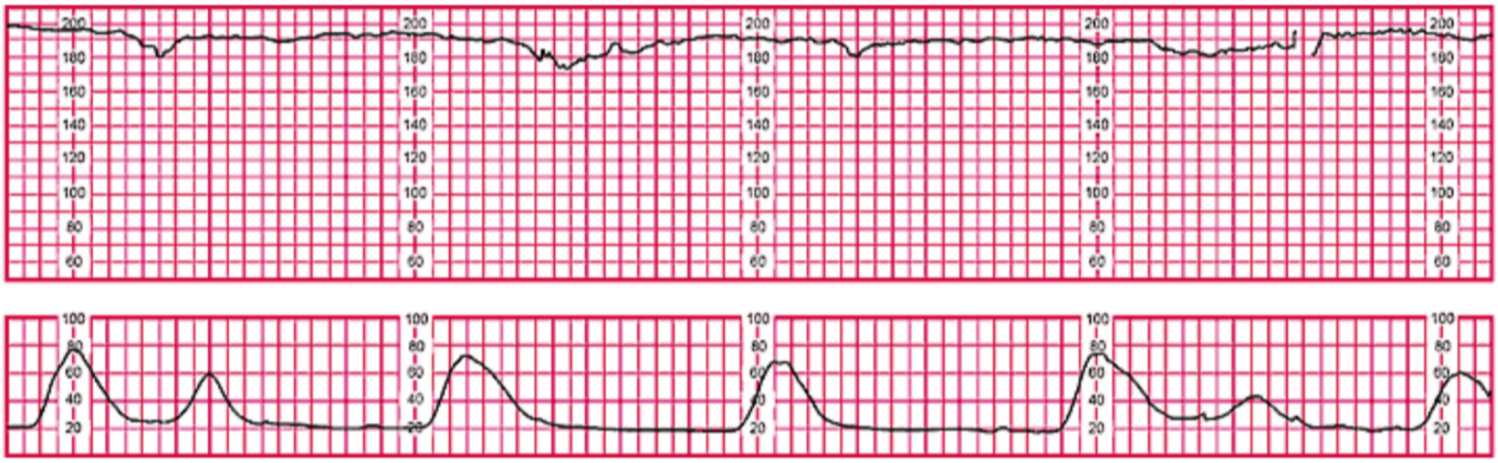
Minimal baseline variability can be due to fetal sleep

Both images show variable decelerations caused by umbilical cord compression

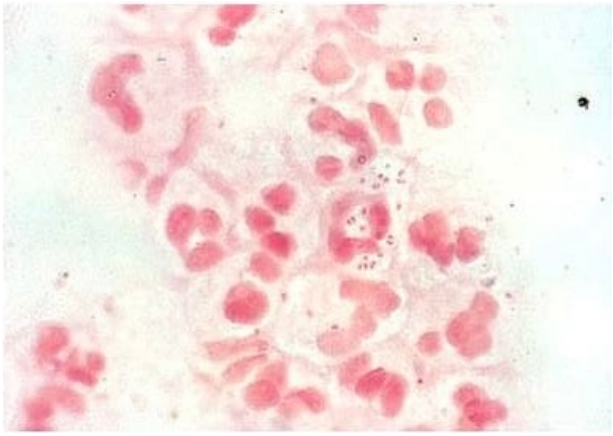




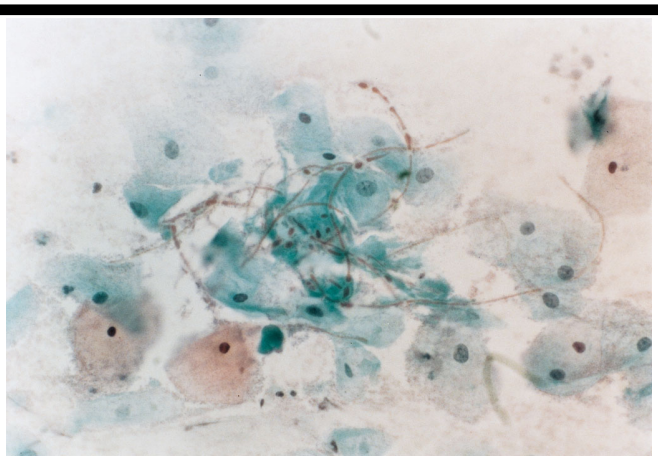
Both are late decelerations due to uteroplacental insufficiency → fetal hypexemia & acidemia.



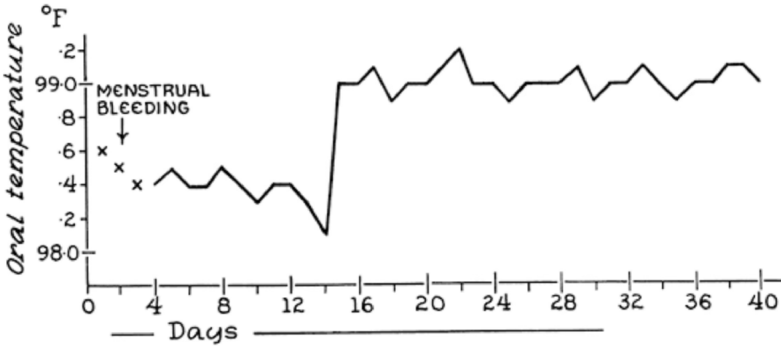
Fetal tachycardia maybe due to chorioamnionitis



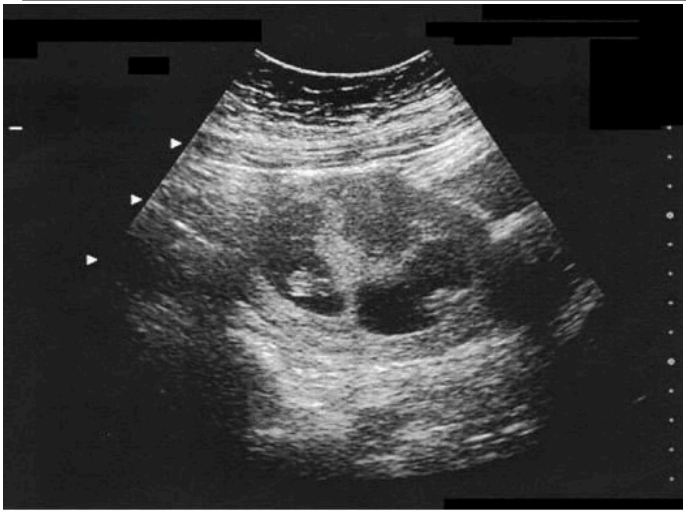
Neisseria gonorrhea: intracellular gram negative diplococci



Psuedohyphae → candida vulvovaginitis.
Rx: Vaginal antifungals (e.g miconazole).



Increased basal body temperature in the luteal phase is caused by progesterone



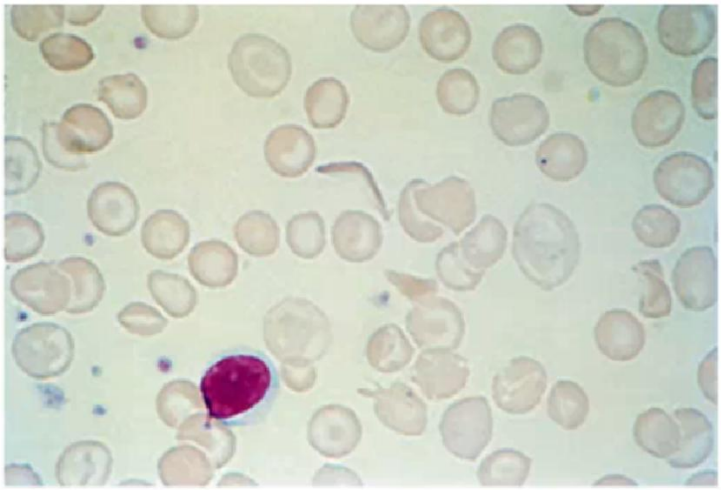
2 amniotic cavities and thick membrane indicates dichorionic diamniotic twin

Genital herpes HSV1/2

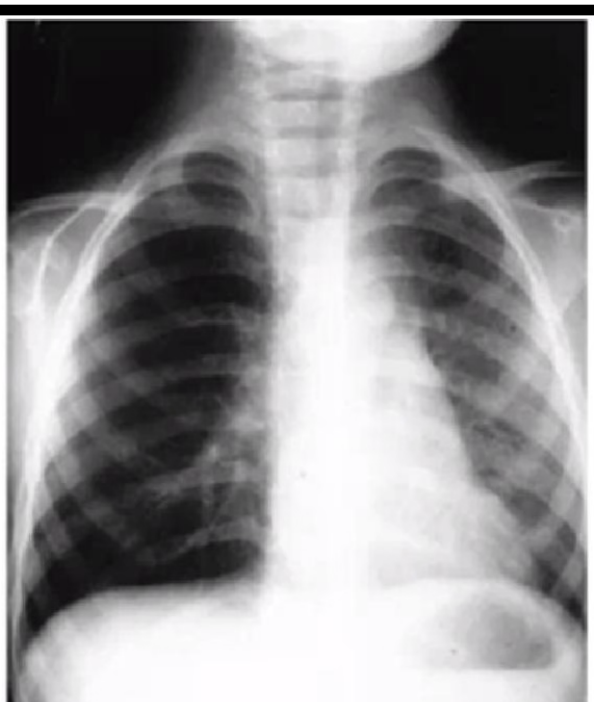
Pathological fracture

Impetigo contagiousa

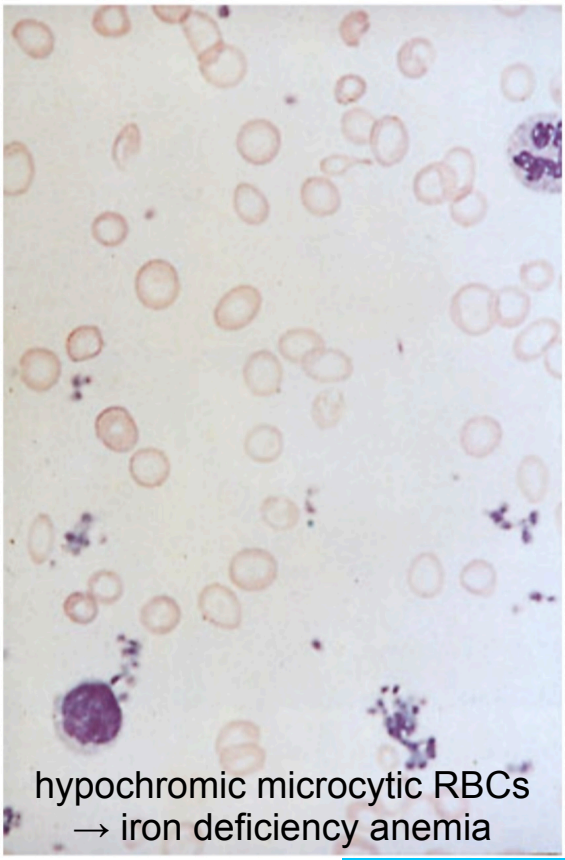
Congenital melanocytic nevus



Hypochromic microcytic RBCs with Target cells → Thalassemia

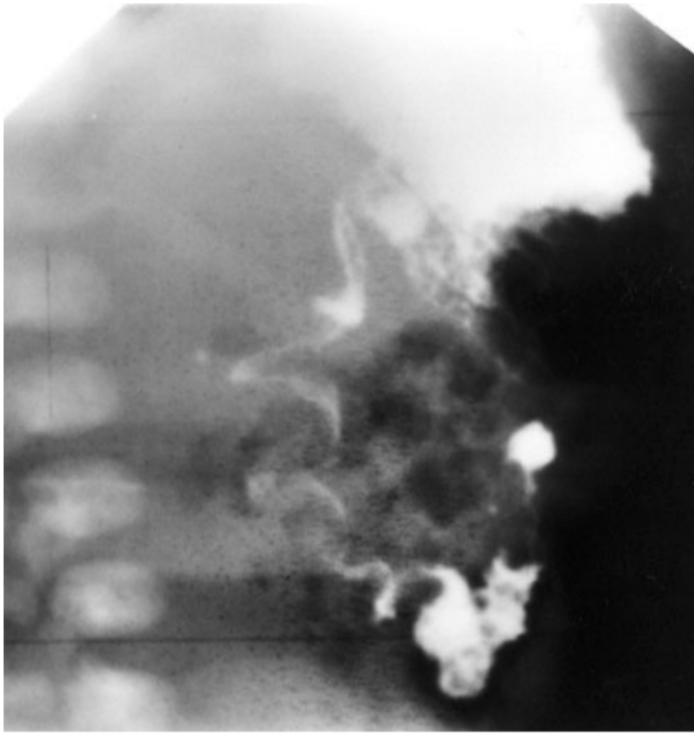


Hx: chocking. Ex: wheeze on right side. CXR: hyper-inflated right lung due to right main bronchus obstruction by foreign body

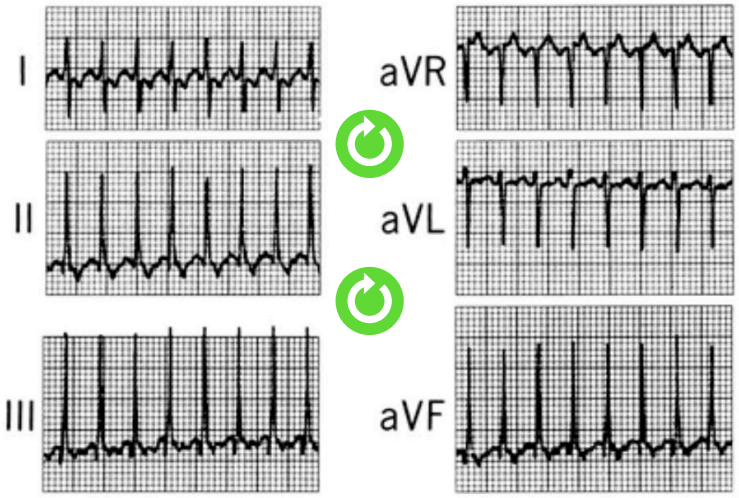


hypochromic microcytic RBCs → iron deficiency anemia

Upper GI barium study: intestinal malrotation (small bowel only on right side)



Upper GI barium study: spiral appearance of duodenum → midgut volvulus due to intestinal malrotation

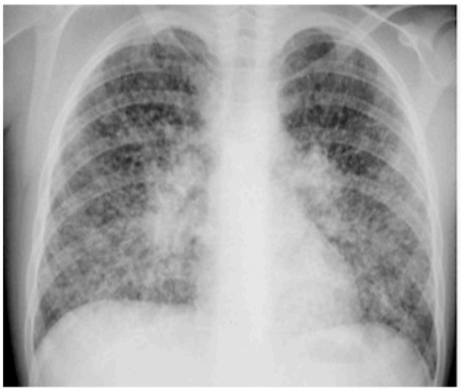


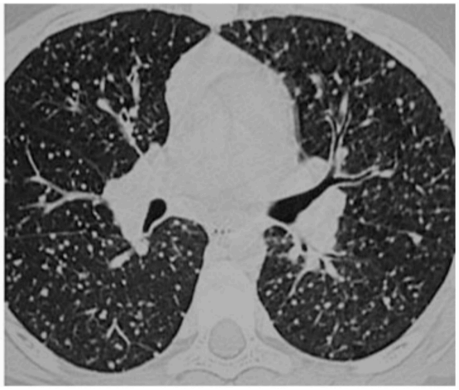
Supraventricular tachycardia (SVT)

Leukocoria + exotropia → retinoblastoma

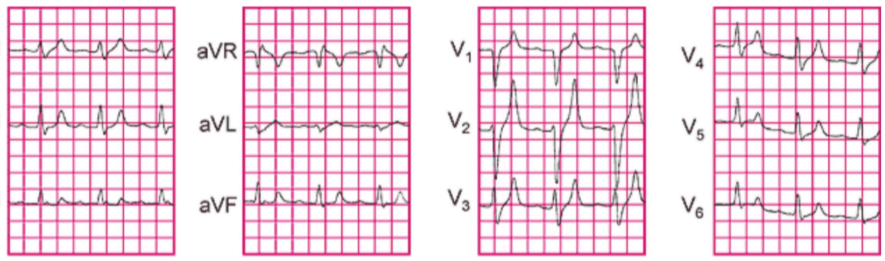
Erythema migrans → Lyme disease

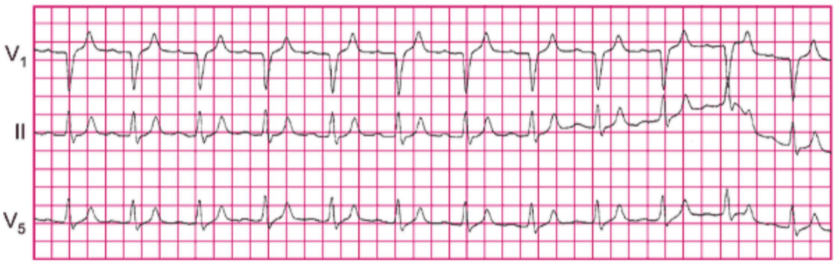
Dark macules + bloody stool = Peutz-Jeghers syndrome → need colonoscopy





Histoplasmosis: small calcified nodules and mediastinal or hilar lymphadenopathy



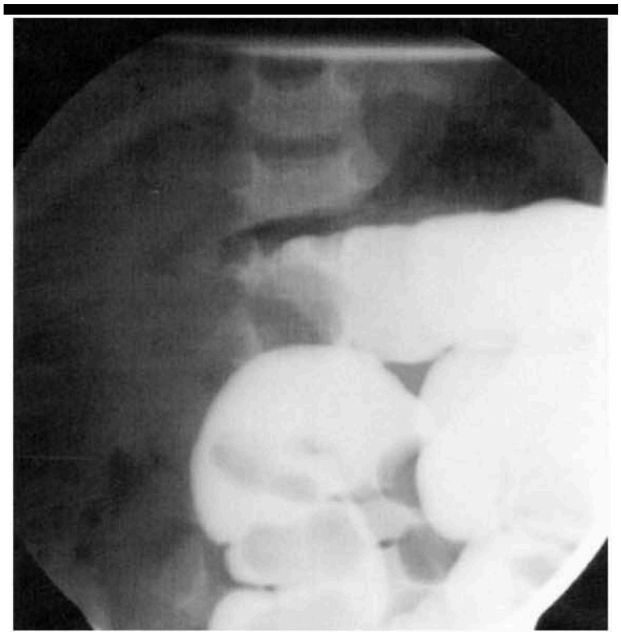


ECG changes of hyperkalemia: peaked T, prolonged PR, loss of P wave, wide QRS.
Rx: IV calcium gluconate/chloride

Periventricular calcification + SNHL = congenital CMV. Dx by viral culture or PCR of urine or blood.

Tinea corporis.
Rx: Topical clotrimazole

Severe tinea capitis (kerion)
Rx: oral antifungals (as griseofulvin)

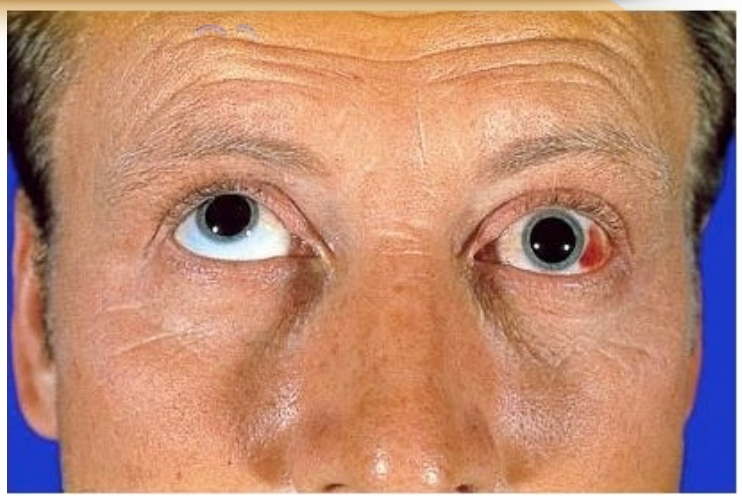


Contrast enema of intussusception

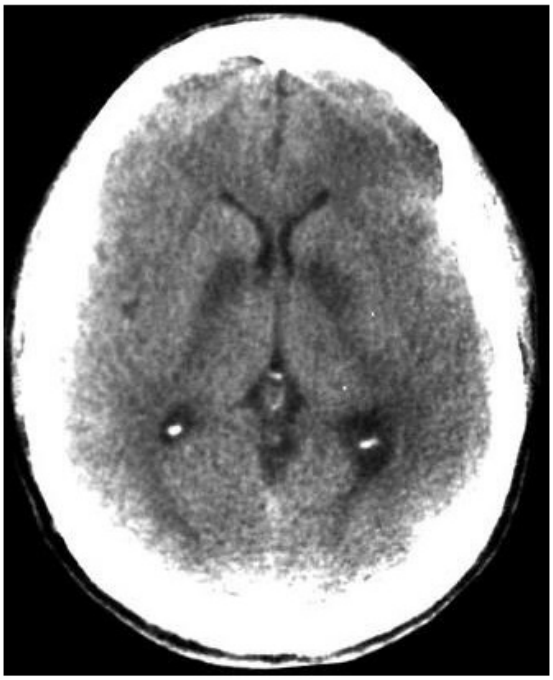
Stevens-Johnson syndrome

CMS - Neurology

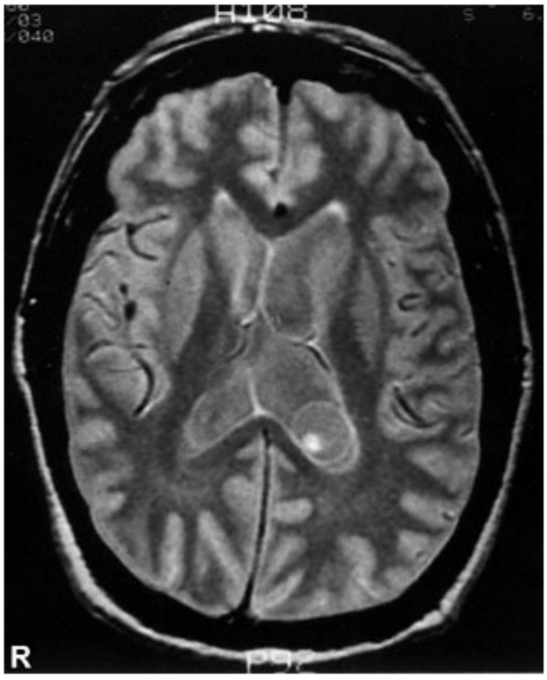
Arsenic poisoning: pigmentary skin changes, Mees' lines, peripheral neuropathy



Left eye: entrapped inferior oblique due to blowout fracture → cannot elevate eye.



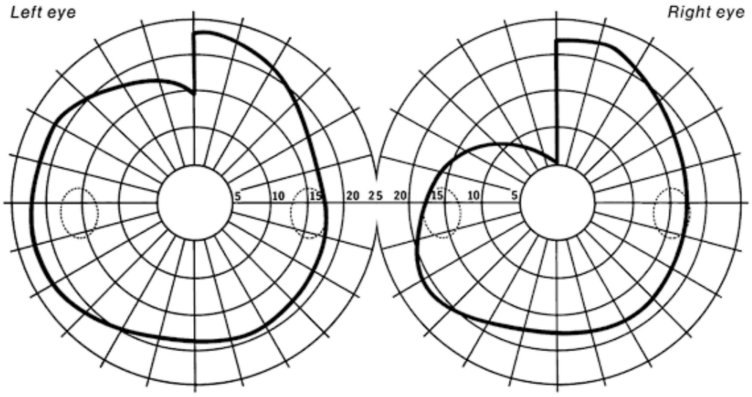
Bilateral globus pallidus hypo-density due to carbon monoxide poisoning.



Neurocysticercosis (feco-oral transmission) Leads to seizures

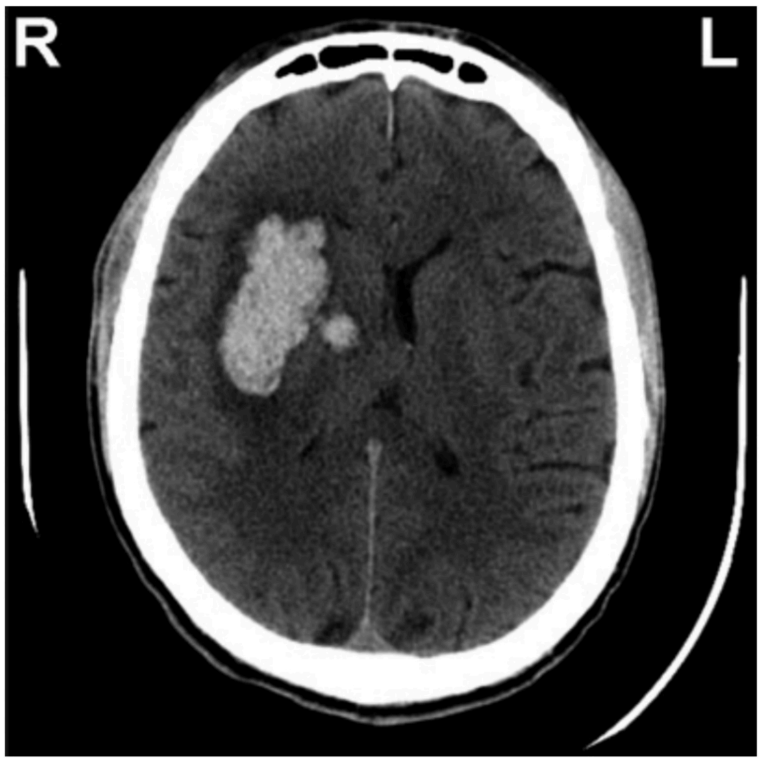
Papilledema (with headache & vitamin A → idiopathic intracranial hypertension)

SAH (e.g due to ruptured aneurysm)

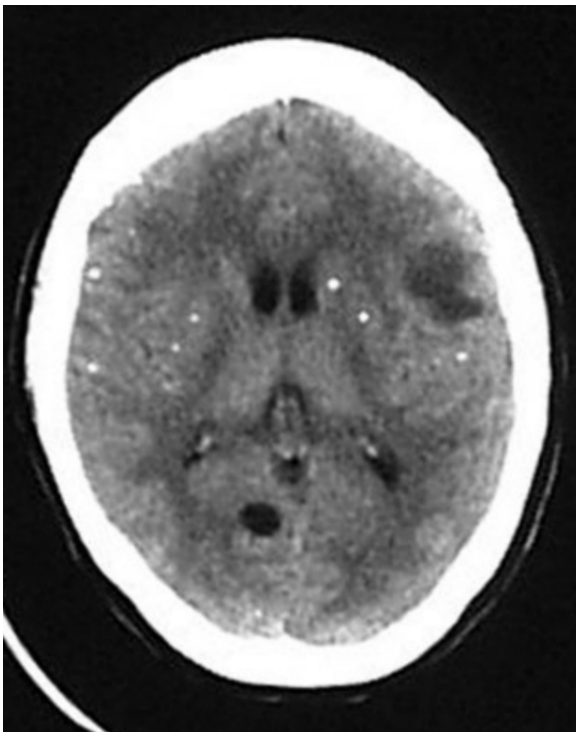


Left superior quadrantopia, indicates right Mayer loop (inferior optic radiation) lesion in the temporal lobe

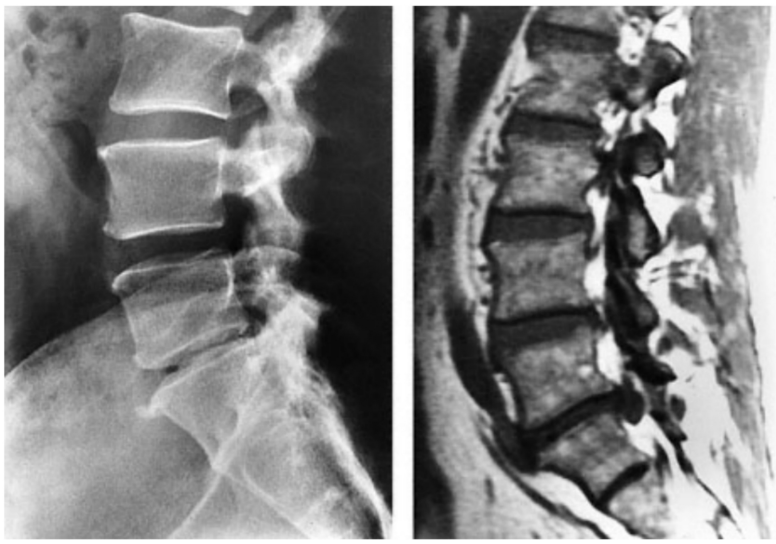
Proliferative diabetic retinopathy



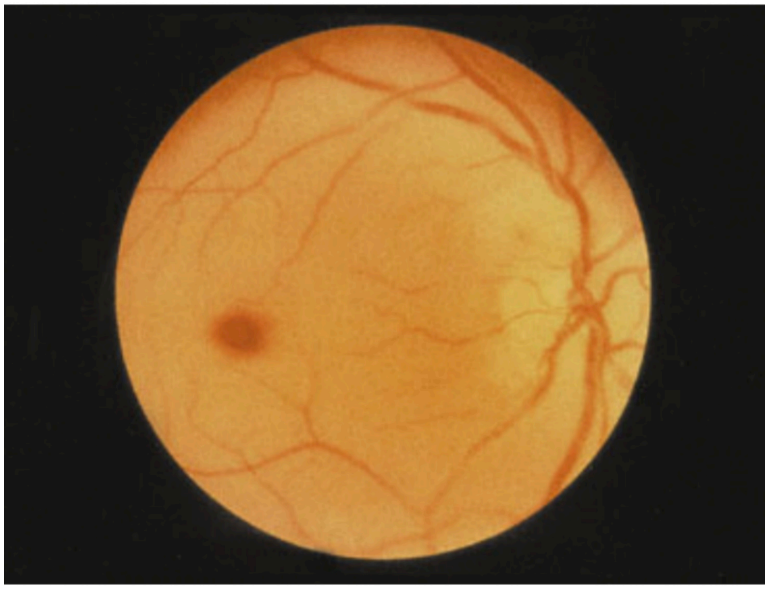
Hypertensive intracerebral hemorrhage



Neurocysticercosis



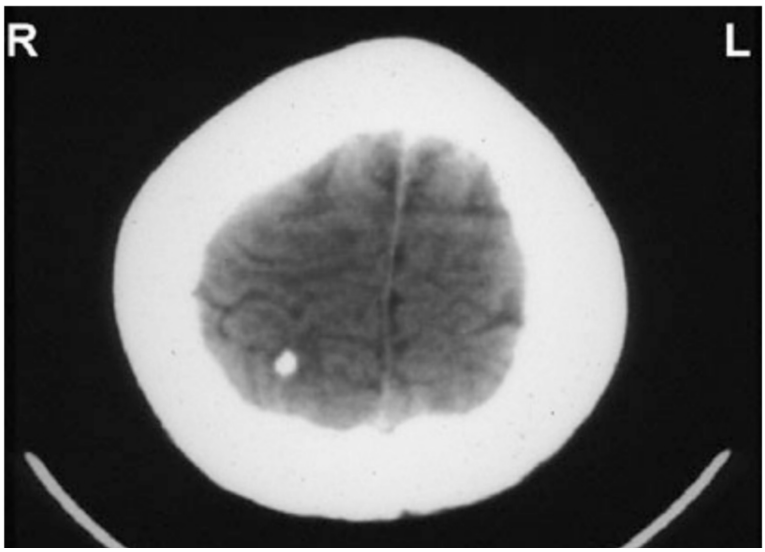
L5-S1 disc herniation



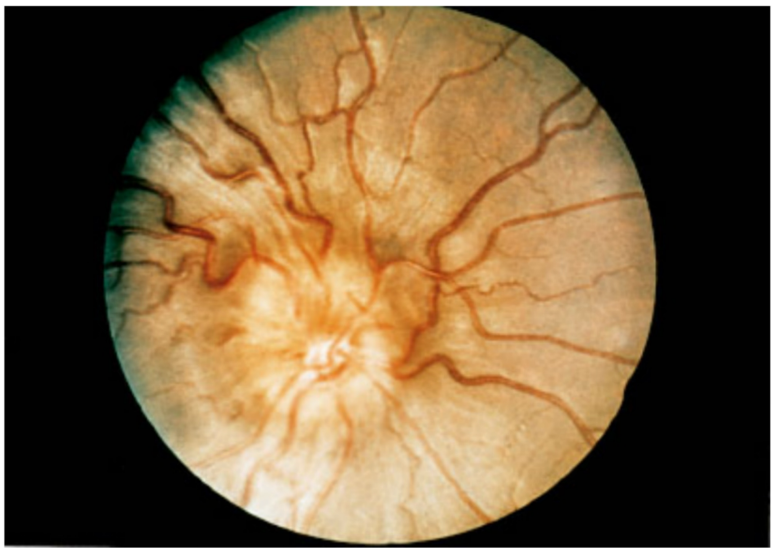
CRAO: pale fundus + cherry red spot

Bilateral dislocation of facets (possibly compressing C6 nerve root)

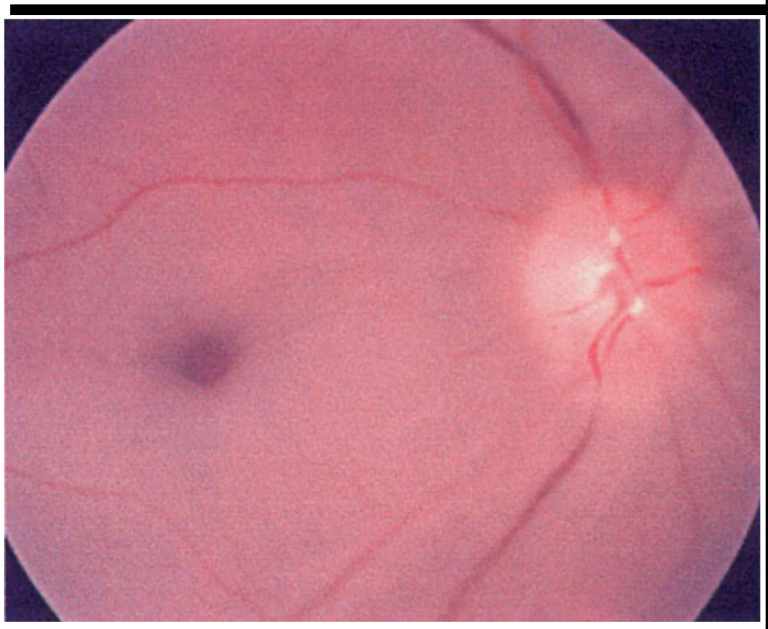
Erbs palsy and lymphedema from radiotherapy and mastectomy for breast cancer.



Neurocysticercosis (calcified lesion)
Screened by stool exam for ova & parasites

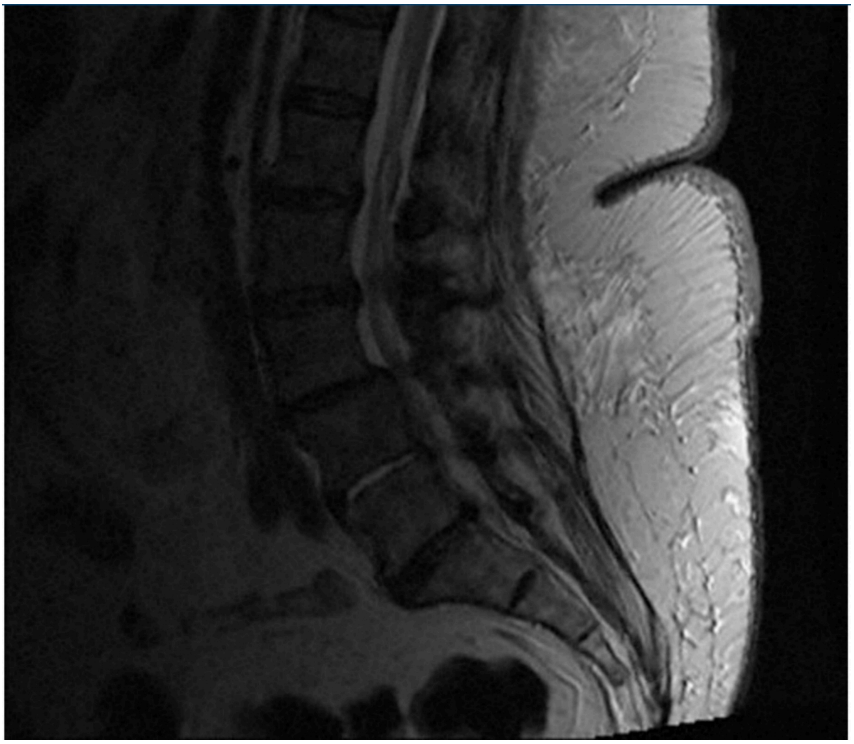


Optic disc edema, can be due to hypertensive encephalopathy → give nitroprusside

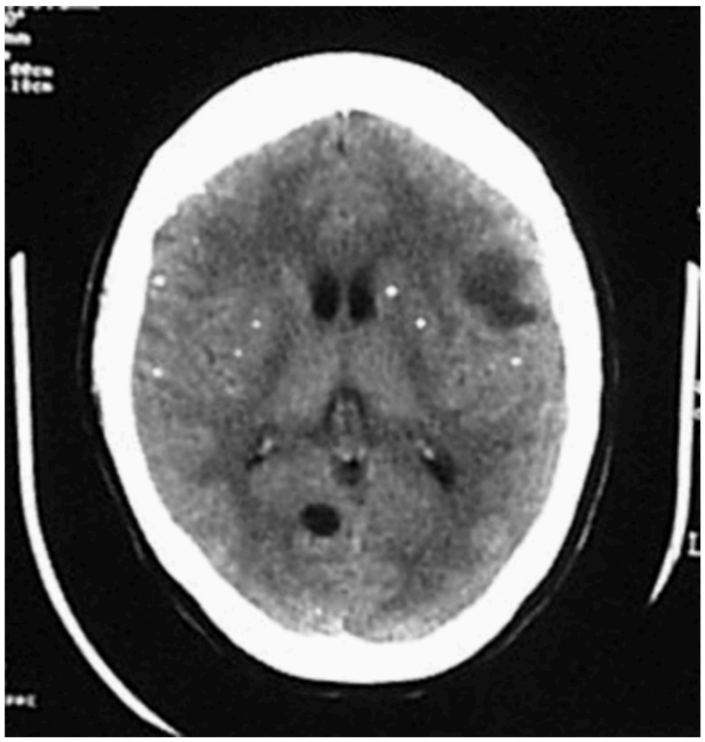


CRAO: pale fundus + cherry red spot

Amaurosis fugax from temporal arteritis (answer didn't mention any fundoscopy signs)

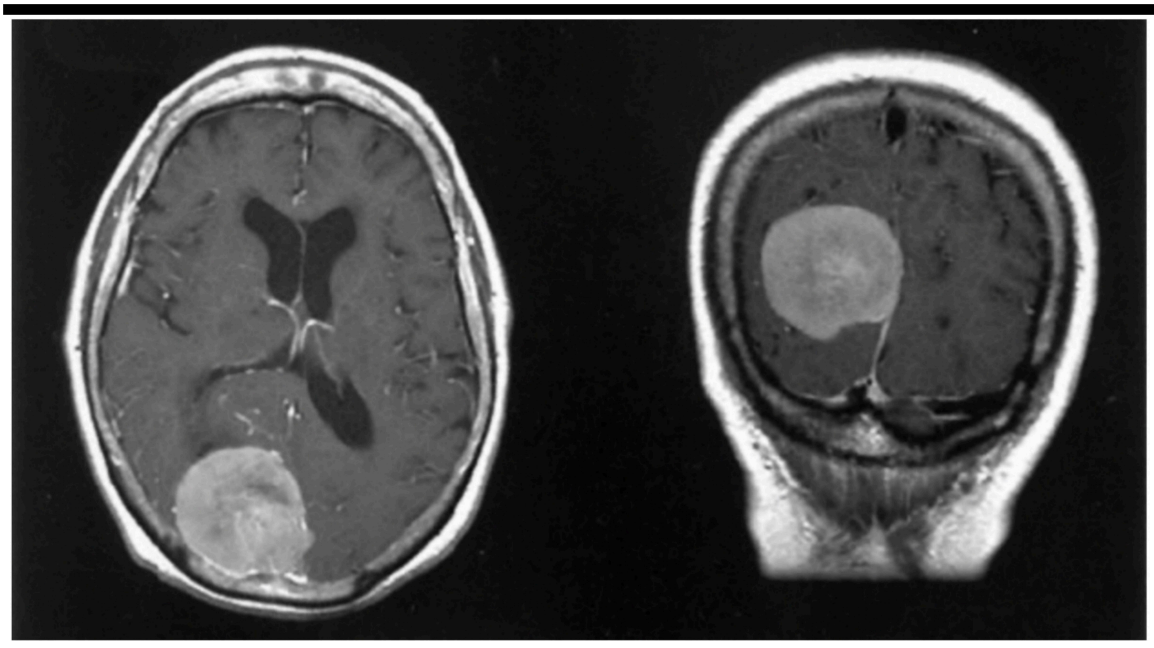


Intervertebral discitis → IV antibiotics



Neurocysticercosis

Facial angiofibroma + intraoral fibroma + seizure → tuberous sclerosis (do CT of brain)



Meningeoma: extraaxial, well circumscribed spherical, uniformly enhancing mass

CMS forms of psychiatry doesn't contain images. Probably because they couldn't get into the minds of patients……

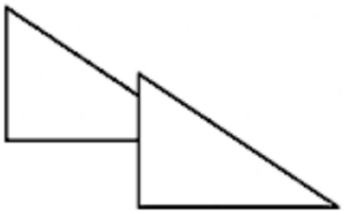


Figure 1

Figure 2

The only image in all psychiatry CMS forms is this drawing (figure 2) made by an old guy with Alzheimer symptoms compared to normal (figure 1). The disease is associated with abnormal TAU protein.

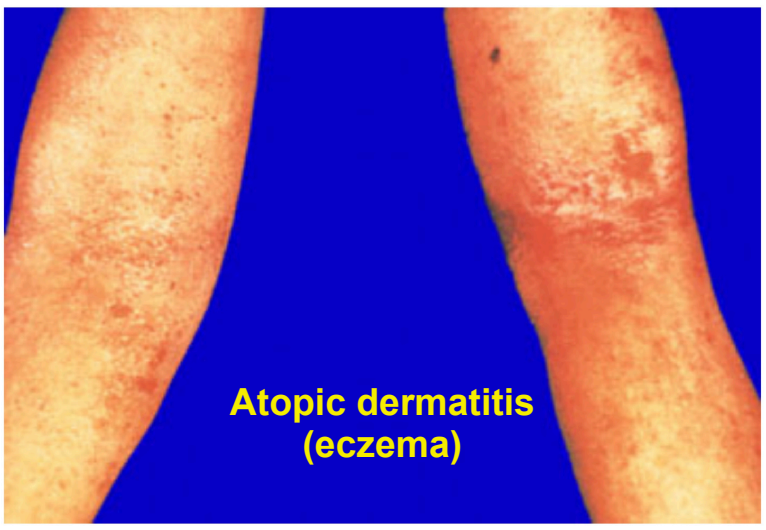
Tinea capitus.
Rx: Oral Griseofulvin (don't treat contacts)

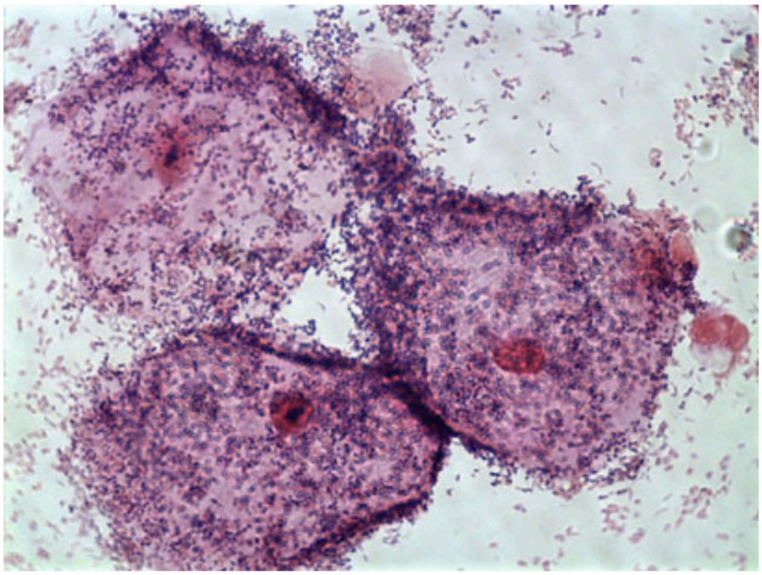
Herpes zoster ophthalmicus (shingles)
Rx: oral valacyclovir

Tinea (pityriasis) versicolor.
Rx: topical selenium sulfide

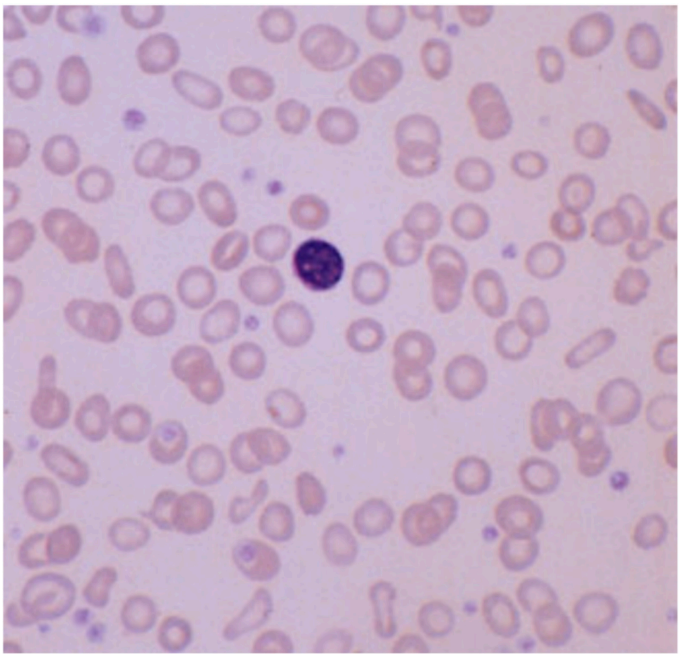
Moderate inflammatory acne. Oral tetracycline can cause phototoxicity → avoid sun exposure

Tinea corporis.
Rx: topical antifungal (e.g clotrimazole)





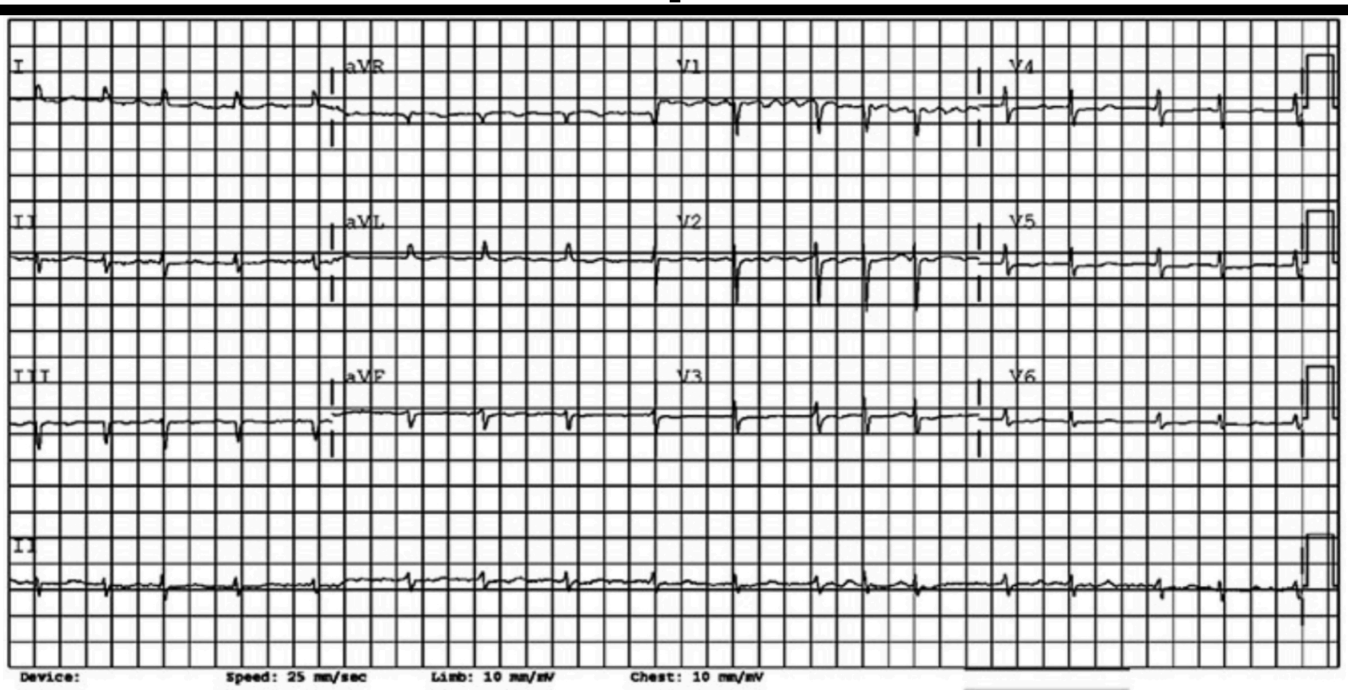
Clue cells → bacterial vaginosis
Rx: metronidazole



hypochromic microcytic RBCs → iron deficiency anemia

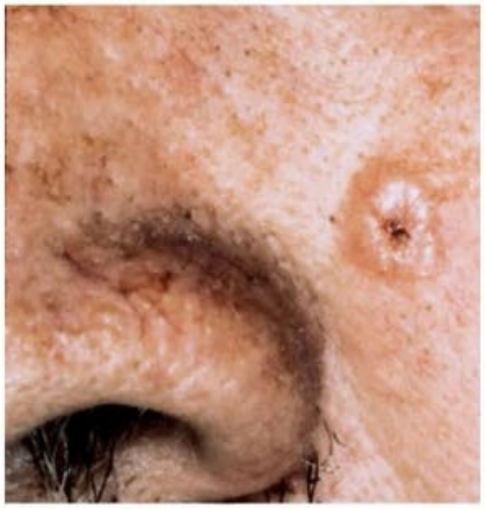
Atopic dermatitis (eczema)
First line: topical moisturising cream

Tinea pedis (interdigital distribution).
Rx: topical antifungal (e.g clotrimazole)



Atrial fibrillation: no P waves, irregular, narrow-complex tachycardia → decreases LV filling → exacerbates HF

OA of shoulder. avoid NSAIDs if patient has CKD or IHD.

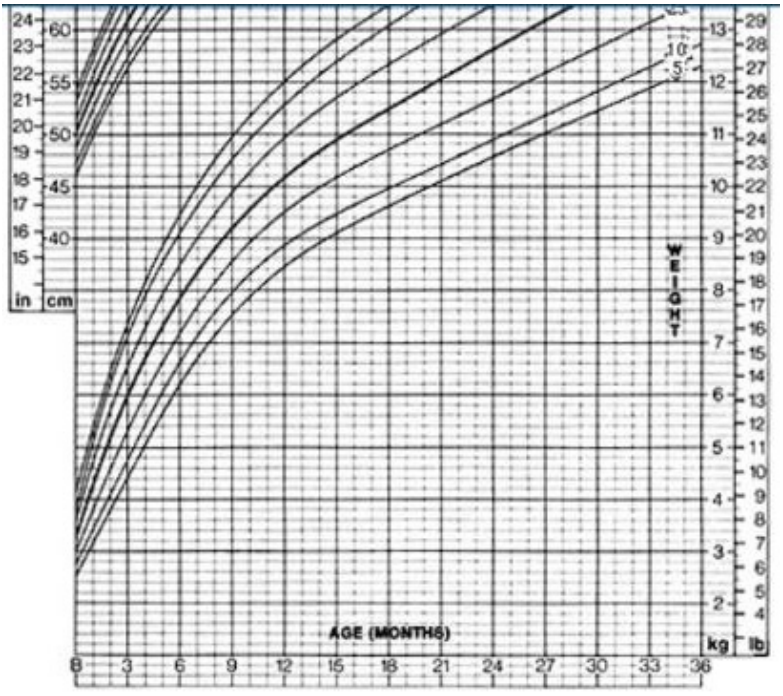


BCC (Pearly papule, rolled border, telangiectasia)

Scabies
Rx: topical permethrin

Actinic keratosis

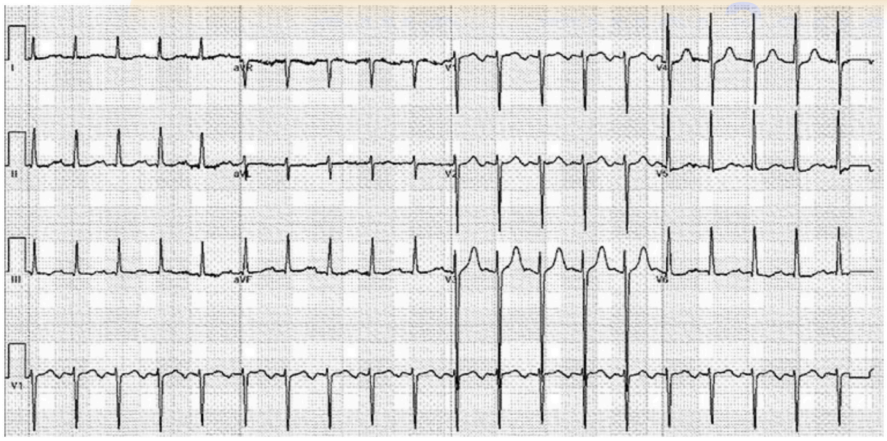
Psoriasis (salmon colored plaque with silvery scale)



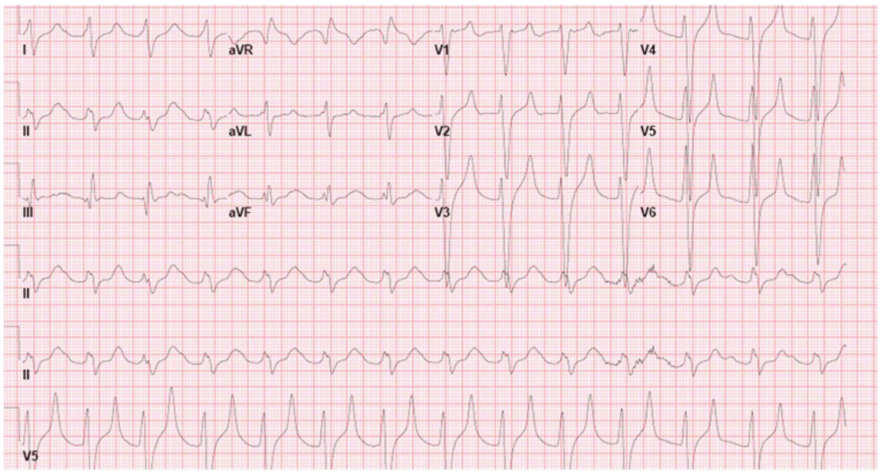
Plotting a male weight on growth charts:
Birthweight: 3500 g → 50th percentile
At 4 months: 7000 g → 65th percentile
His weight is appropriate for age.

Urticaria (when acute, no need additional work up)

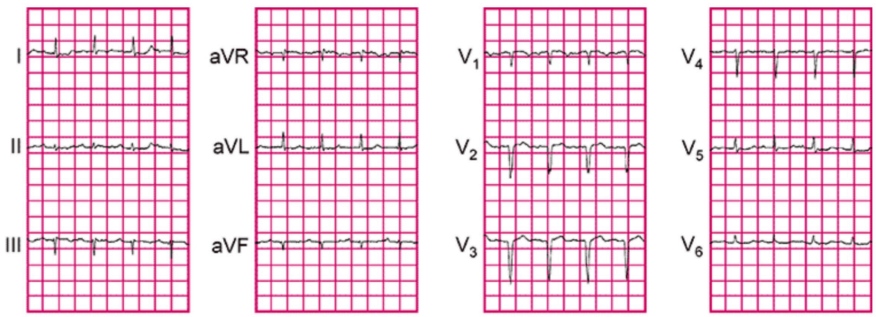
CMS - Emergency Medicine

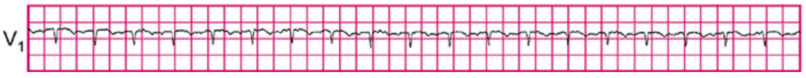


The case was acute pulmonary edema due to hypertensive emergency (NBME didn't say what are ECG findings but it said there is no STEMI)



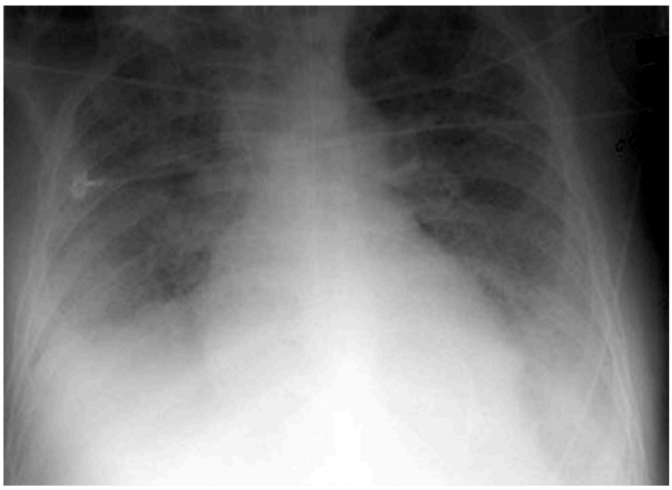
ECG changes of hyperkalemia: peaked T, prolonged PR, loss of P wave, wide QRS.
Rx: IV calcium gluconate/chloride





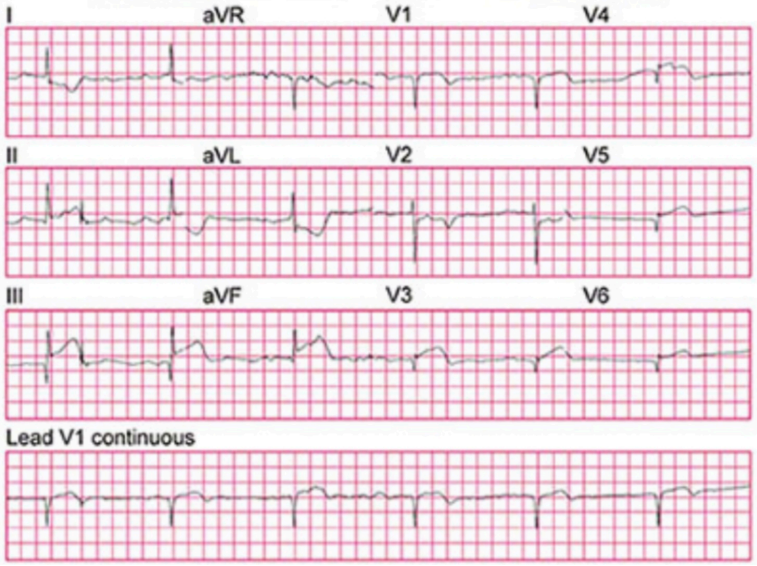
ECG changes of PE: **<u>sinus tachycardia,</u>**
RAD, RBBB, S1Q3T3.
Dx by CT angiography of chest.
Rx if obstructive shock: IV alteplase.

Toxic multi-nodular goitre.
Rx: propranolol then antithyroid drugs.

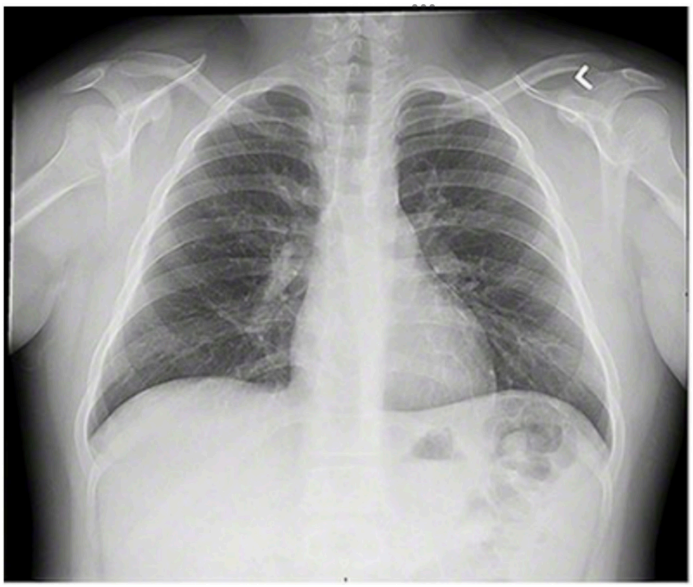


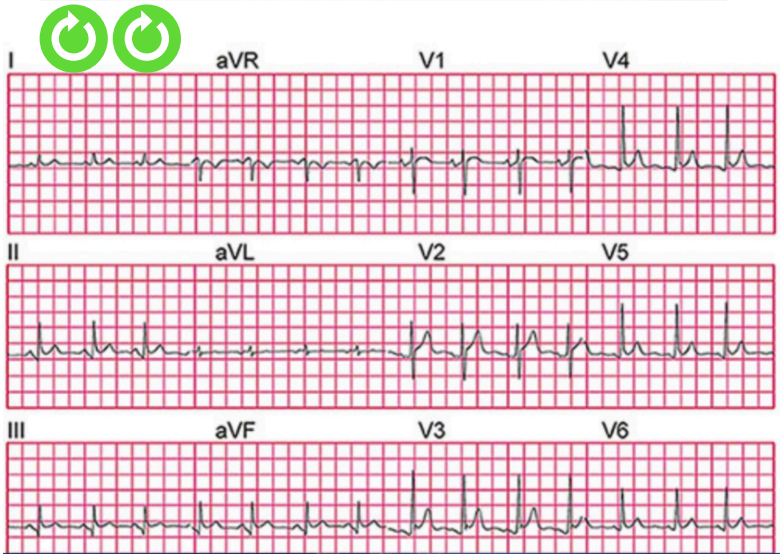
Acute chest syndrome in sickle cell, usually precipitated by infection.

Abscess; treat by incision & drainage

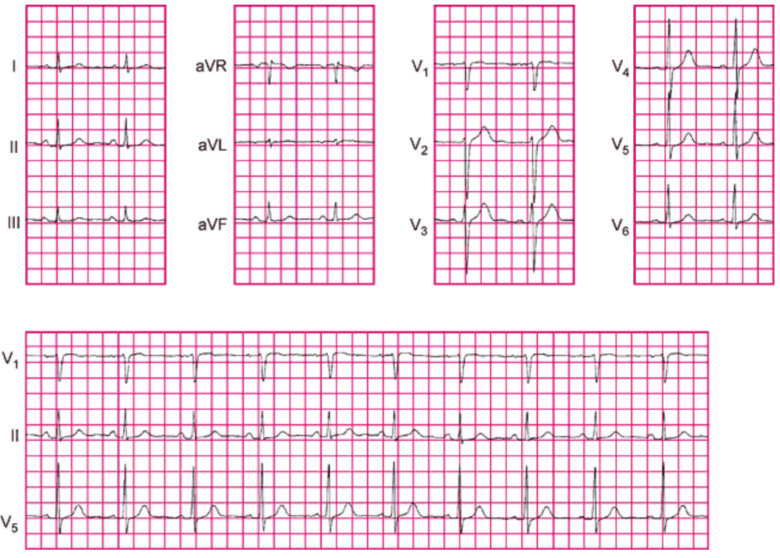


Aortic dissection
CXR: widened mediastinum
ECG: inferior STEMI (II, III, aVF)
Rx: β-blocker & nitroprusside

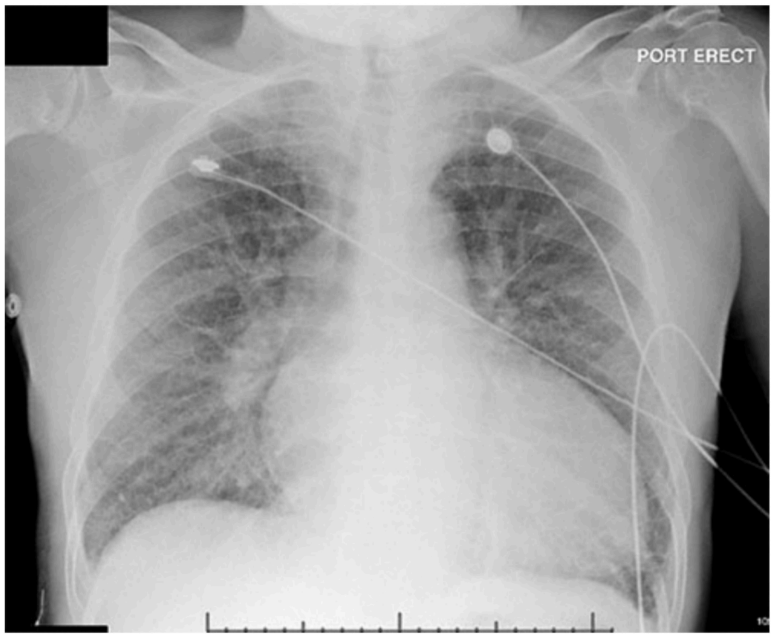




Pericarditis
CXR: normal
ECG: diffuse ST elevation, PR depression
Rx: NSAID (as ibuprofen) + colchicine

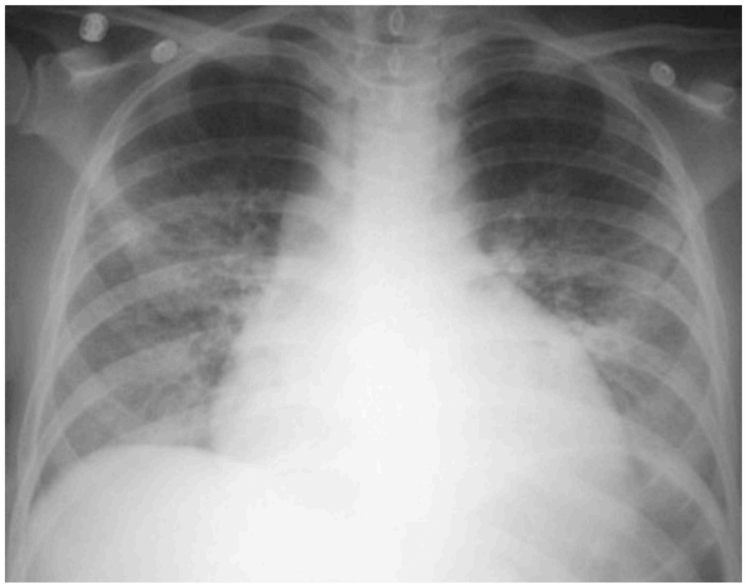


ECG of unstable angina (this one is normal)



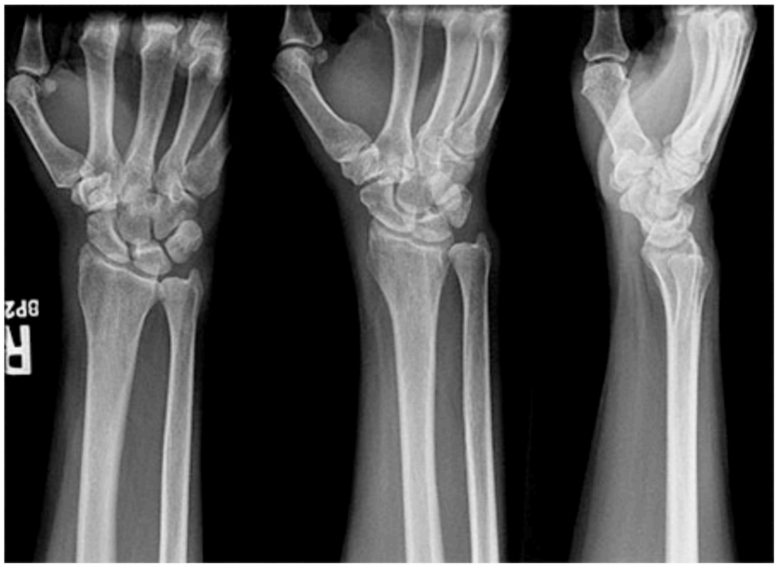
Globular cardiomegaly + pulmonary edema
Suggests pericardial effusion/tamponade
Dx by Echocardiography

Right ureterovesical junction calculus.
Rx: tamsulosin



Cardiogenic pulmonary edema

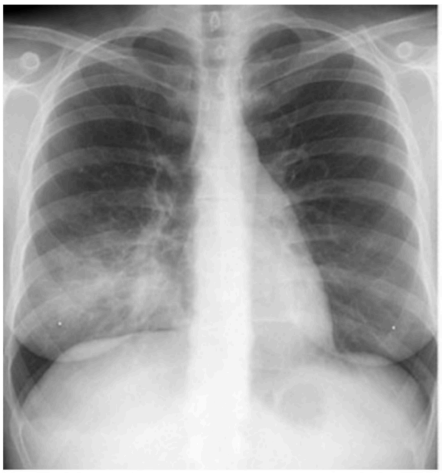
US of LUQ:Hypoechoic fluid between spleen and left kidney → splenic injury.

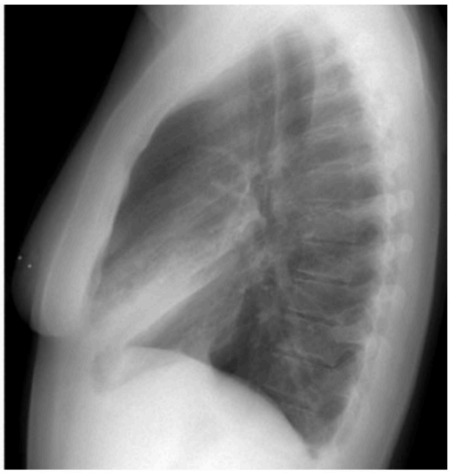


X Ray of scaphoid fracture
Rx: thumb spica cast

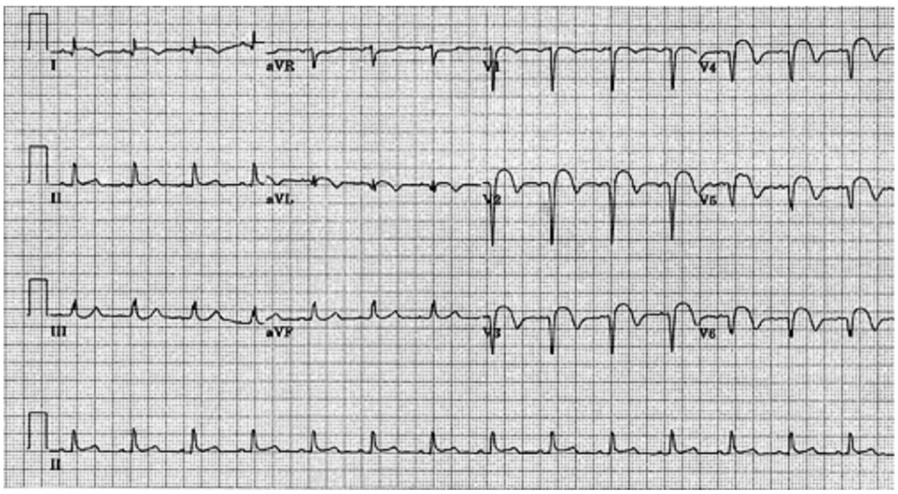
Partial thickness (second degree) burn

Pustular rash (dermatitis) of disseminated gonococcal infection. Other findings are septic polyarthritis and tenosynovitis.

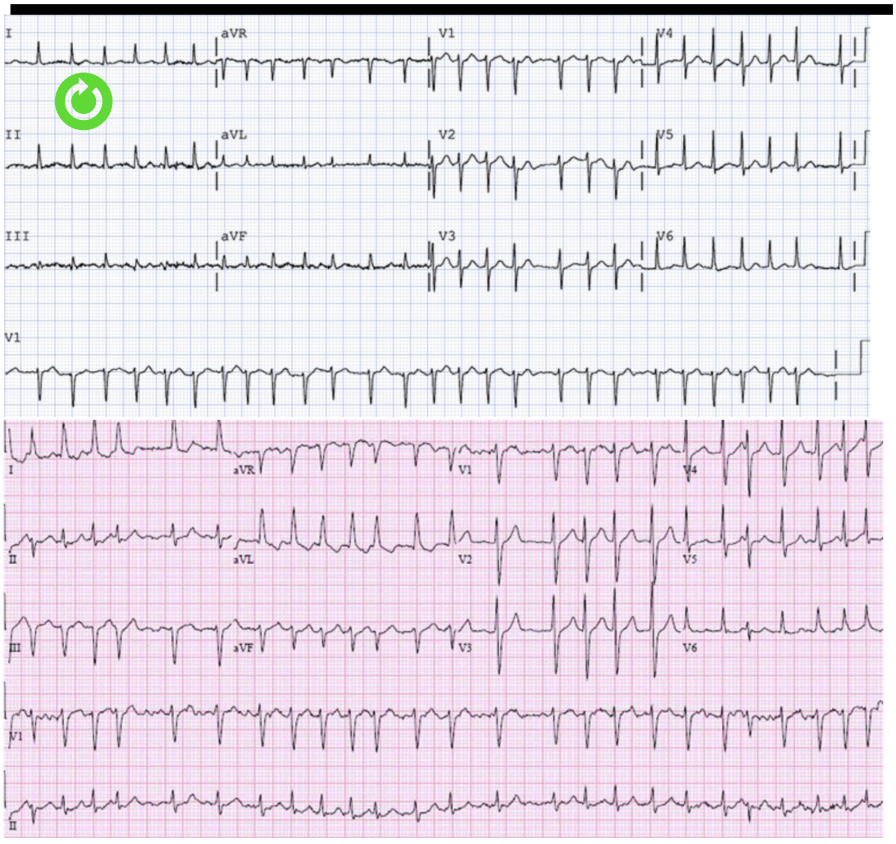




Consolidation (pneumonia) on right lower zone.
Infections can precipitate a thyroid storm.
Dx by TFT.
Rx: propranolol then antithyroid drugs.

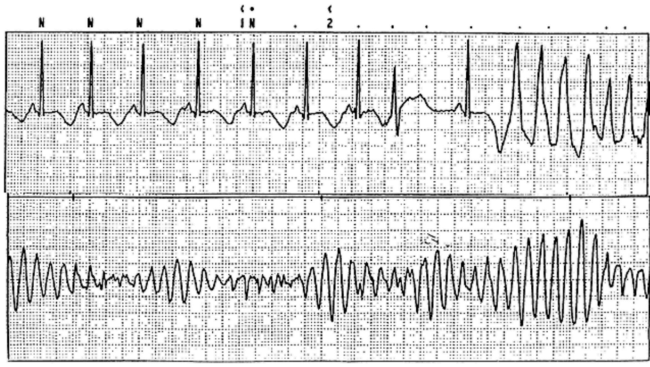


Anterolateral STEMI (V2-V6)
Culprit artery is left anterior descending (LAD)

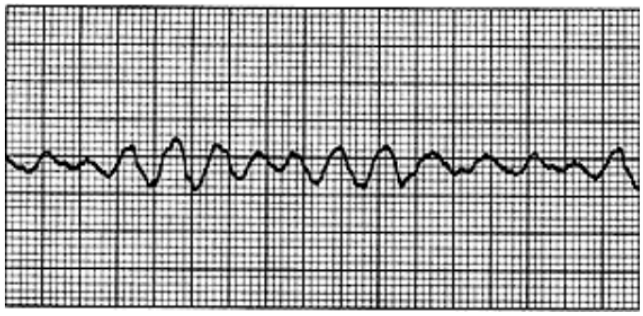


Atrial fibrillation (both): no P waves, irregular, narrow-complex tachycardia.
Rx if unstable: synchronised cardioversion

Cellulitis
Rx: empirical antibiotic



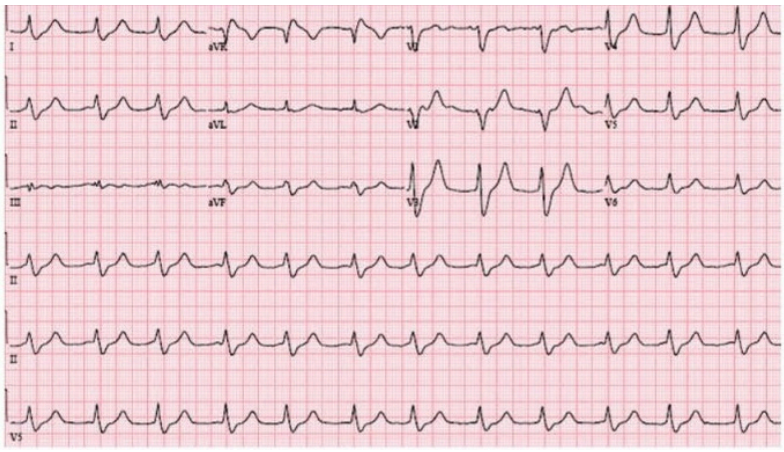
Torsades de pointes (sinusoidal)
Rx: Magnesium



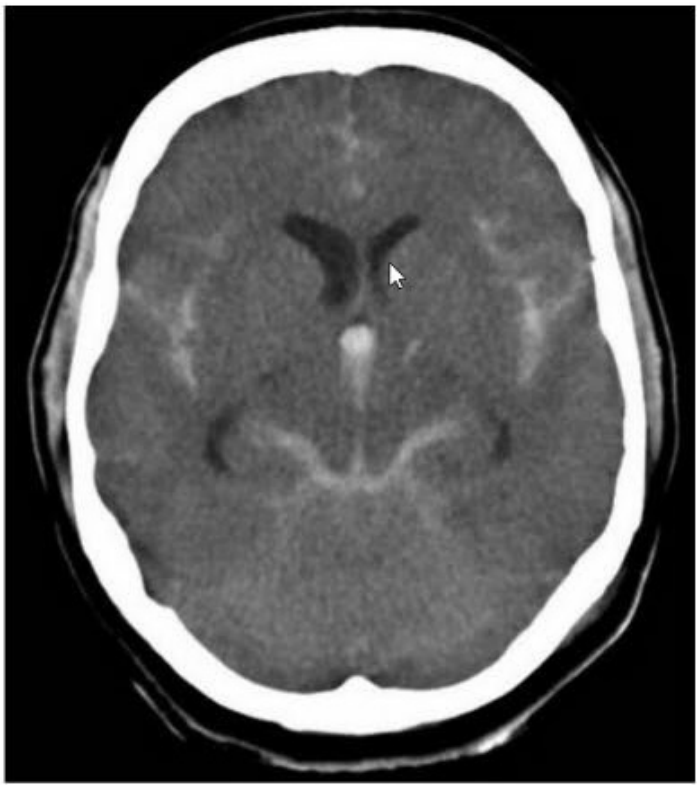
Ventricular fibrillation
Rx: Defibrillation

Echo of pericardial effusion
If tamponade → pericardiocentesis

Erythema migrans → Lyme disease.
Rx: doxycycline if early, ceftriaxone if late



ECG changes of hyperkalemia.
Rx: calcium gluconate, insulin, dextrose.
If it is due to CKD → emergency dialysis

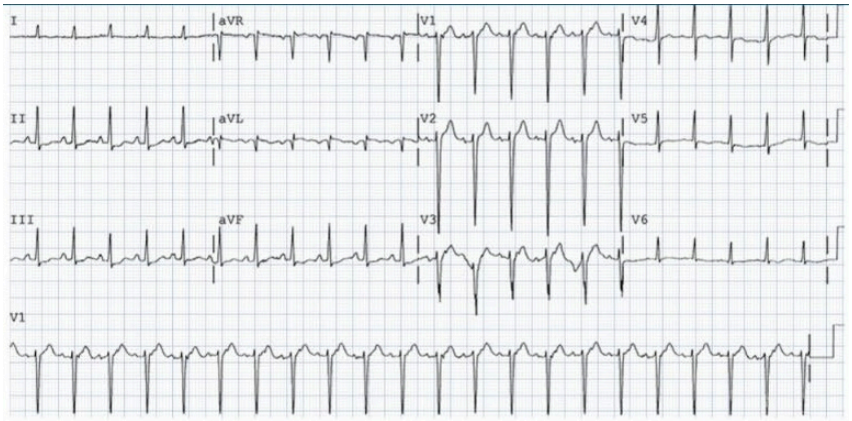


Subarachnoid hemorrhage (SAH), can be due to platelet deficiency or dysfunction (uremia)

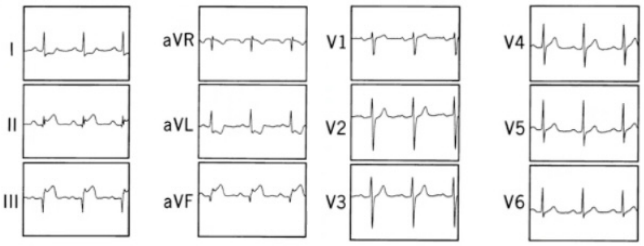
This was a case of crush injury to right leg leading to compartment syndrome
Rx: consult surgeon for fasciotomy.

Left slipped capital femoral epiphysis (SCFE)

US of abscess
Rx: incision & drainage

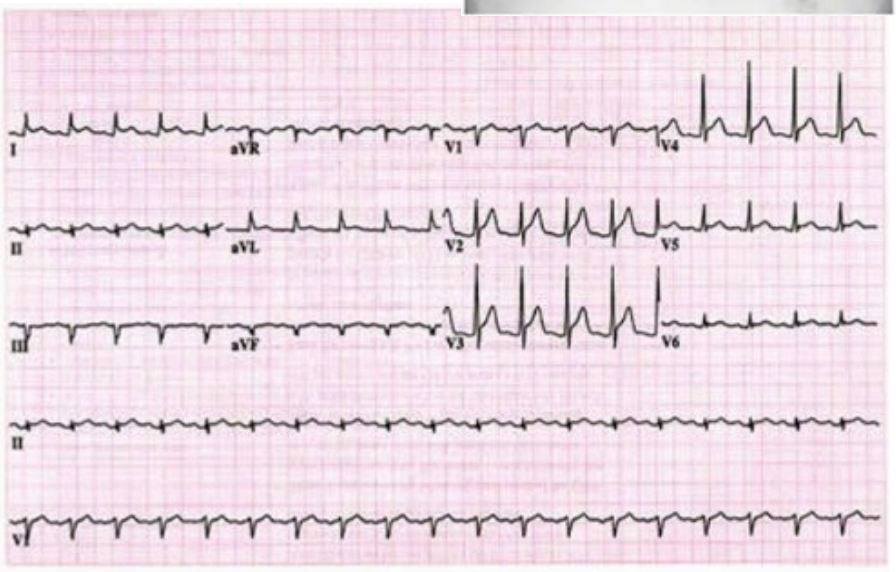


Sinus tachycardia from cocaine.
Rx: benzodiazepines for cocaine-chest pain



Inferior STEMI (II, III, aVF)
Culprit artery is right coronary (RCA)

Pericarditis
CXR: normal.
ECG: diffuse ST elevation and PR depression.
Rx: NSAID (as ibuprofen)

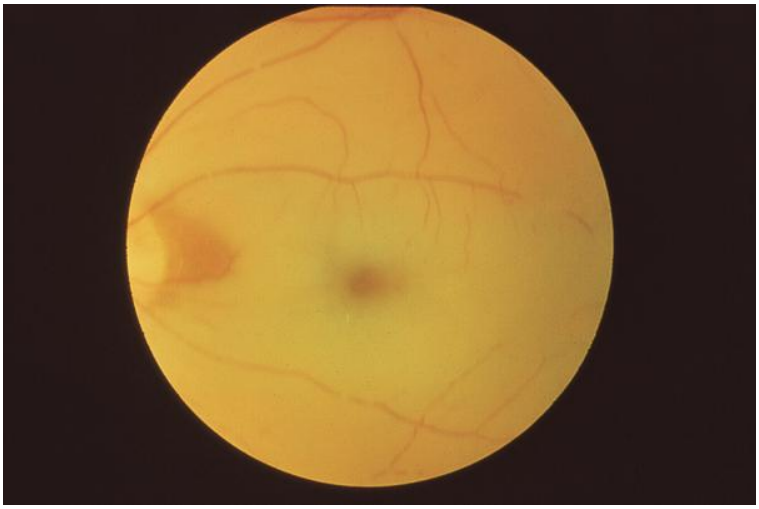


Right lower lobe pneumonia.
If mild → outpatient amoxicillin & azithromycin.
If severe or with comorbidities → admission

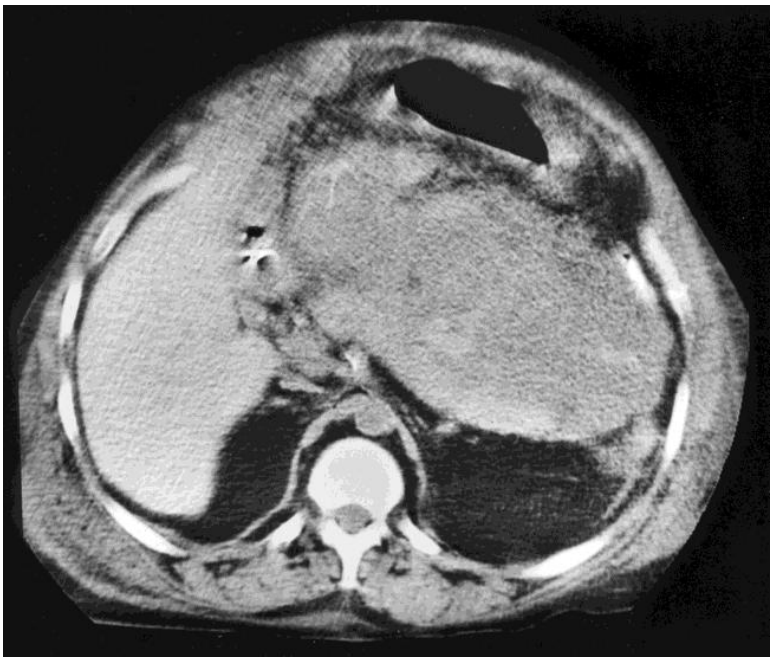
Widened mediastinum → aortic dissection.
Rx: β-blocker & nitroprusside.

Pitting edema of preeclampsia.
LFT is needed if there is RUQ pain (to check for HELLP)

Gottron papules of dermatomyositis



CRAO: pale fundus + cherry red spot



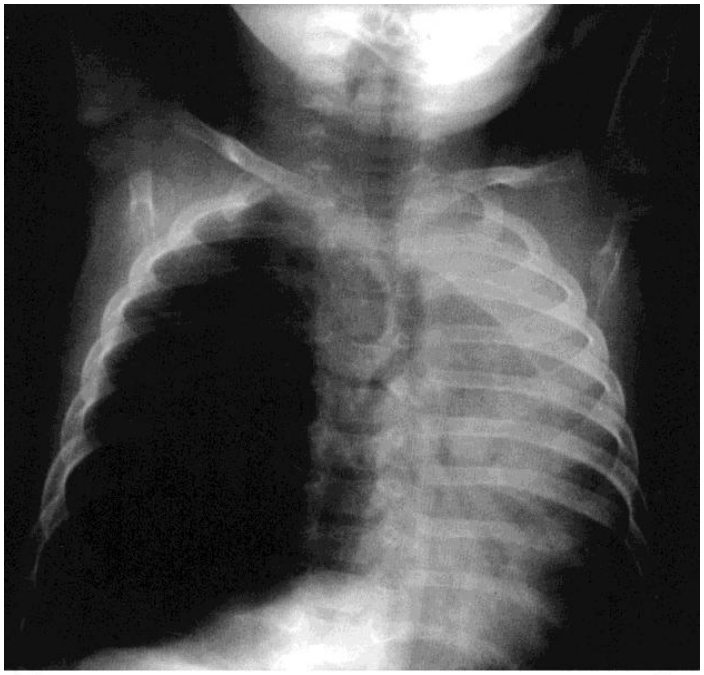
Hemorrhagic pancreatitis

Small bowel obstruction
Next step: NPO & NG tube

Atopic dermatitis (eczema)
Rx: Topical corticosteroids.

Lesion was present for 1 month grew more in last week → do excision.

Herpes zoster



R L

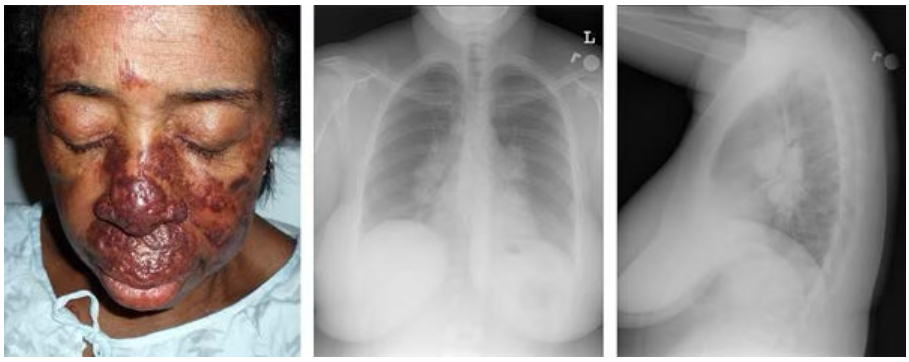
Tension pneumothorax causes obstructive shock by reducing cardiac output

Diffuse intrinsic pontine glioma which have a very poor prognosis.
Next step: discuss the goals of care.

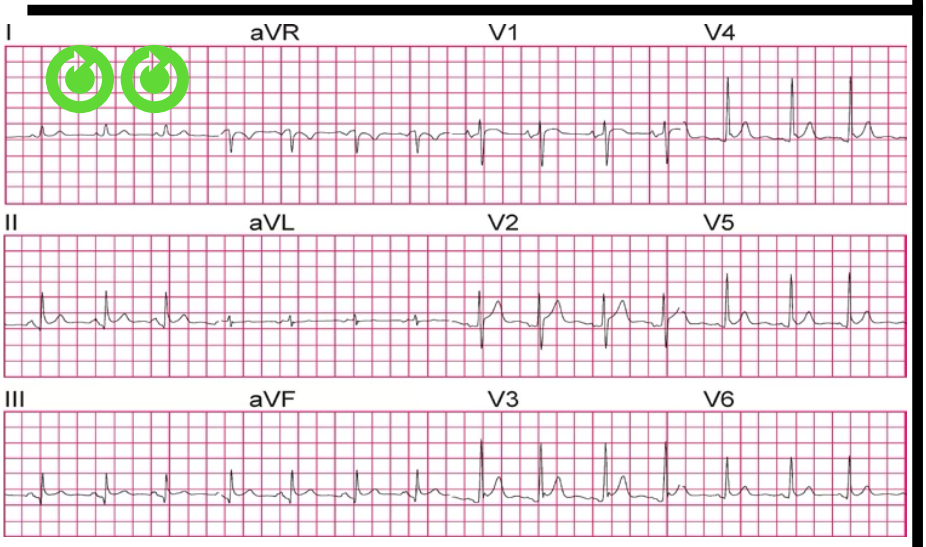
Herpes zoster. Give acyclovir

Neuropathic arthropathy (charcot joint).
Initial therapy is immobilization by splinting.

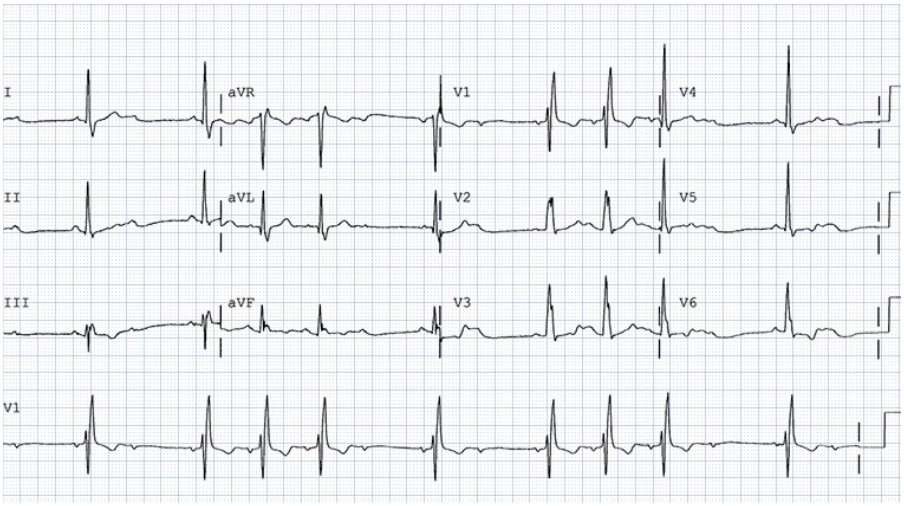
Keratoacanthoma



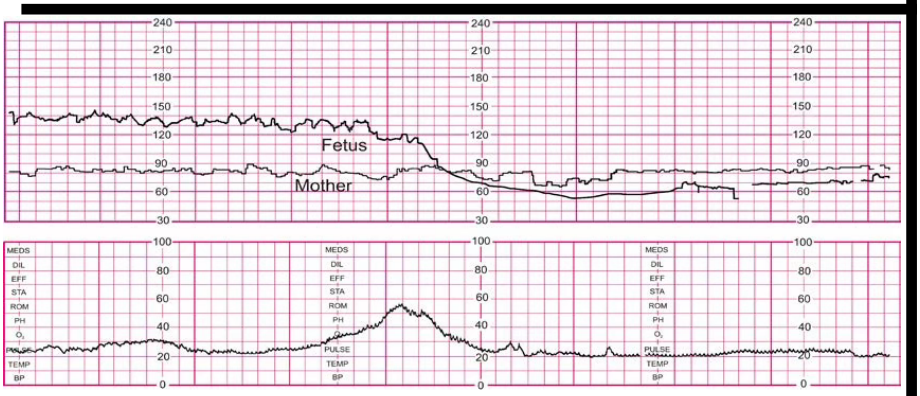
Sarcoidosis: lupus pernio + bilateral hilar LAP



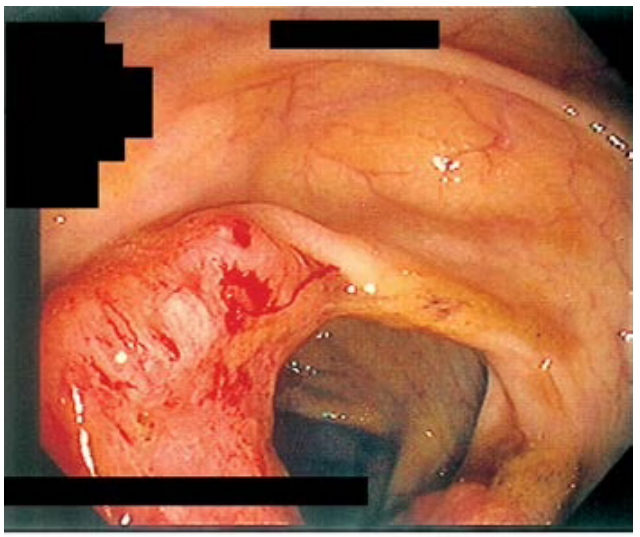
Pericarditis : diffuse ST elevation, PR depression
Rx: NSAID (as ibuprofen) + Colchicine

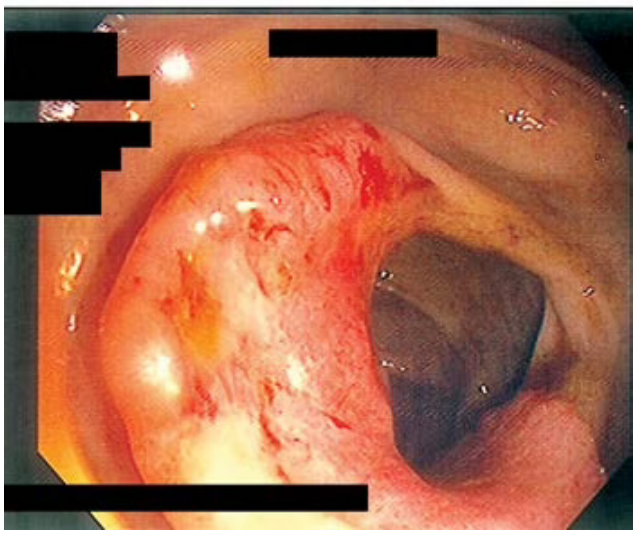


Second-degree (Mobitz type II) atrioventricular block

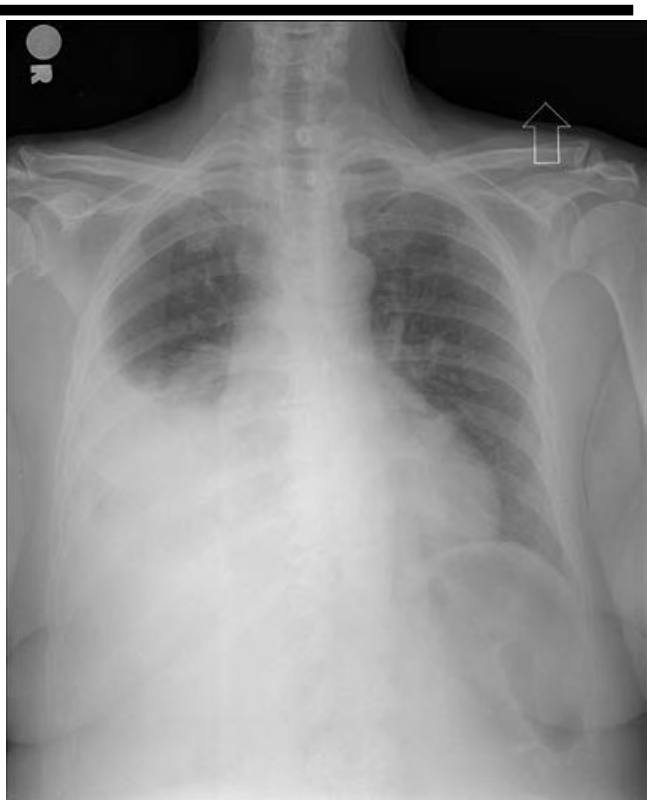


Fetal bradycardia (when onset occurs after rupture of membranes → think about umbilical cord prolapse)

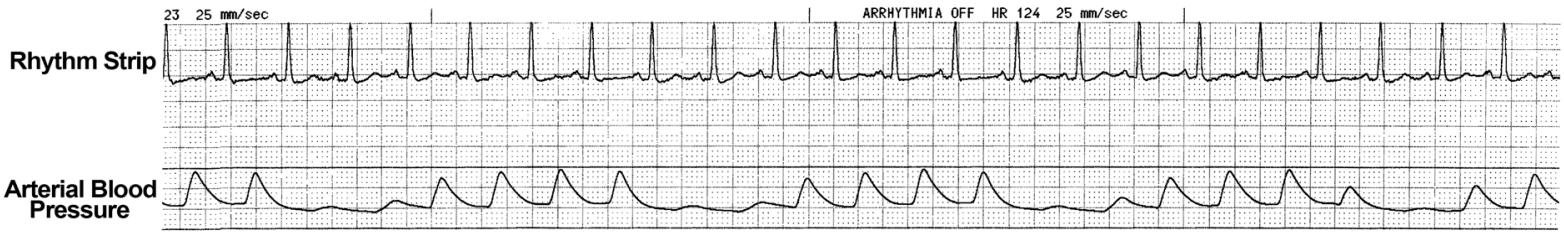




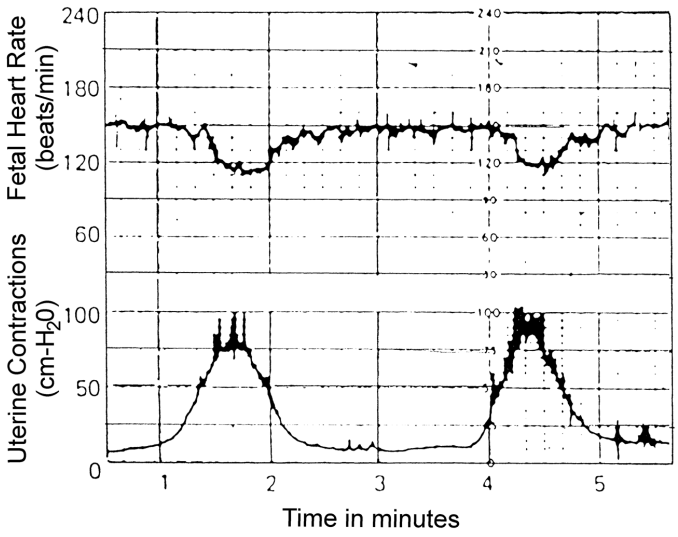
Colonoscopy showing colonic mass. Cancer of ascending colon is treated by right hemicolectomy.



Right pleural effusion. Malignant effusion is exudative (high protein)



Sinus tachycardia with pulsus paradoxicus (which could be due to tamponade → check echo)

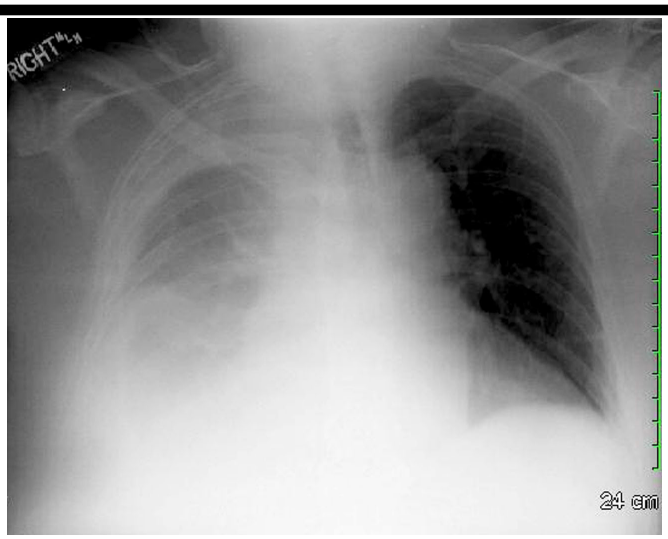


Early decelerations → expectant management

brown recluse spider bites will lead to eschar

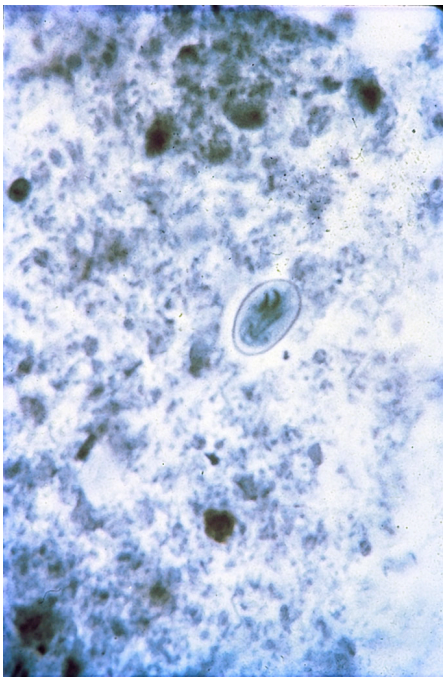
Bicornuate uterus, can lead to preterm labor

Keliod after ear piercing
Rx: corticosteroid injection



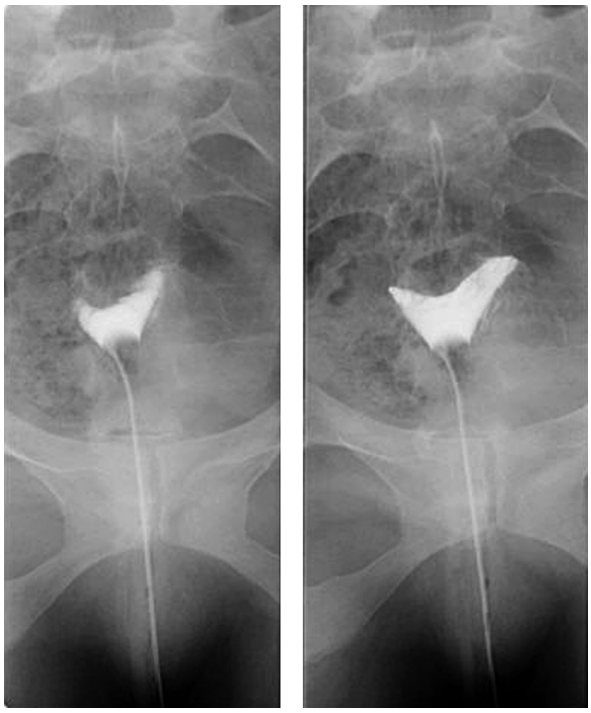
Traumatic hemothorax on right side.
Rx: tube thoracostomy

Kaposi sarcoma

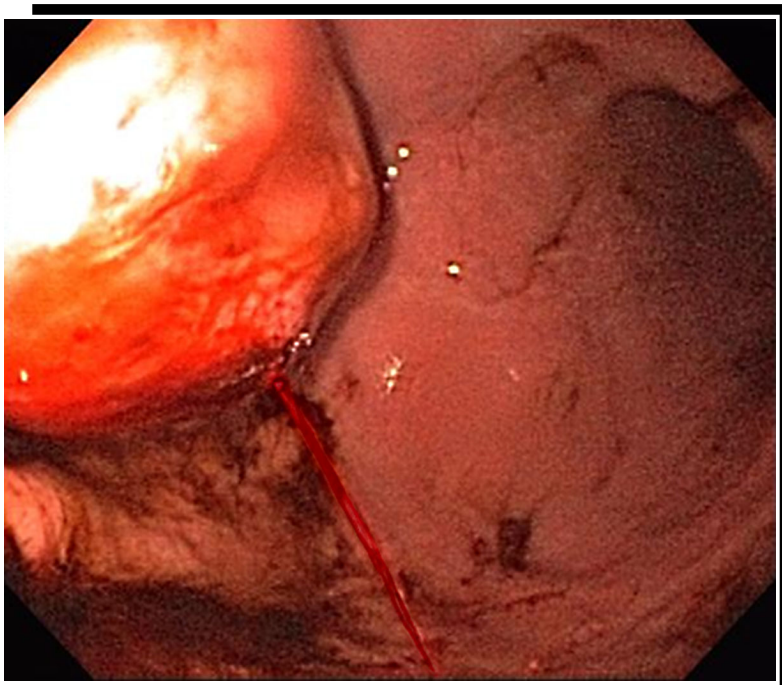


Giardia cysts

Gout

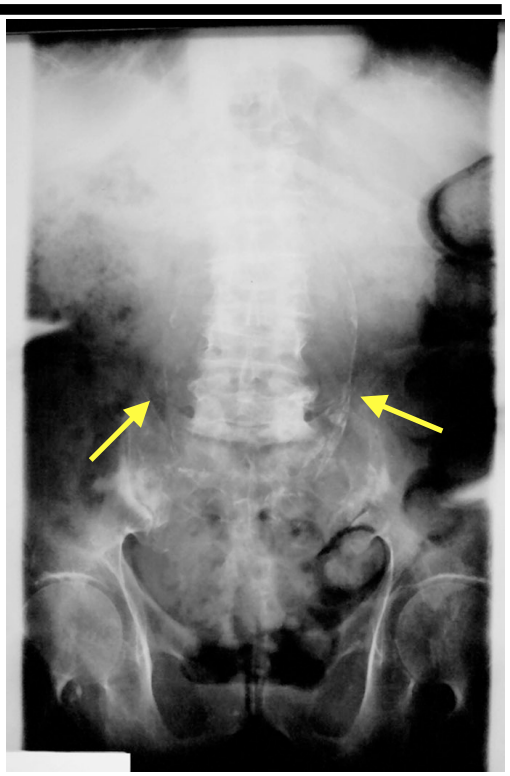


Blocked tubes on HSG from PID which leads to female infertility



Endoscopic view of UGIB with active bleeding.
Rx: endoscopic hemostatic therapy

AAA with aortic wall calcification



Absent thymic shadow in digeorge syndrome which leads to T cell lymphopenia

Allergic contact dermatitis due to flora (e.g poison ivy)

It takes an entire
lifetime to blow
up overnight